

# The White House #Lego Light Kit for 21054 P167

Thank you for choosing Vonado lighting products. We are committed to LEGO product study and lighting development, and we're always trying our best to provide LEGO fans with the best products and the best installation ideas.

Must be careful observation, imagination can be infinitely.

We provide basic parts to support your imagination.

DO IT YOURSELF .that's what LEGO is .

As always, Lego has been adhering to the DIY philosophy from product selection, research and development to sales. Consumers buy the parts, you will assemble them by yourself, and you can experience every step from picking up the first piece to installing the last one. Besides, LEGO has different answers for the installation form and method of each part. Vonado lighting also does not want to kill your unlimited creativity, we will try our best to make products with high variability, high playability and unlimited play. If you have any dissatisfaction or your own ideas on the parts such as the color of the lights, the length of the cables, the installation position of the product, and the final effects of each module, you can make your own arrangement, and we will cooperate with you to replace or repurchase. LETS MOVE!

## Package contents:

- 2 x 15cm White Dot Lights
- 1 x 30cm Warm White Dot Light
- 1 x 15cm Warm White Dot Light
- 2 x 30cm Warm White Headlights
- 2 x 15cm Warm White Head Lights
- 1 x 30cm Multi Colour Flashing Light
- 1 x 12 -port Expansion Board
- 1 x USB Cable

Extra pieces

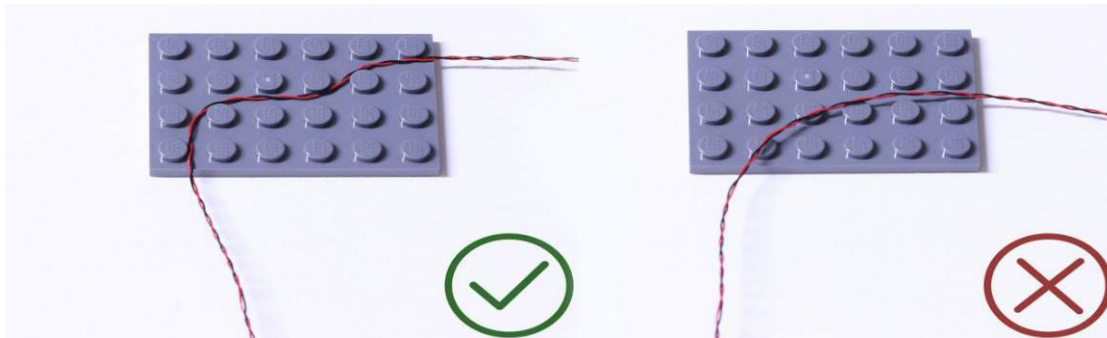


(product display)

## Note:

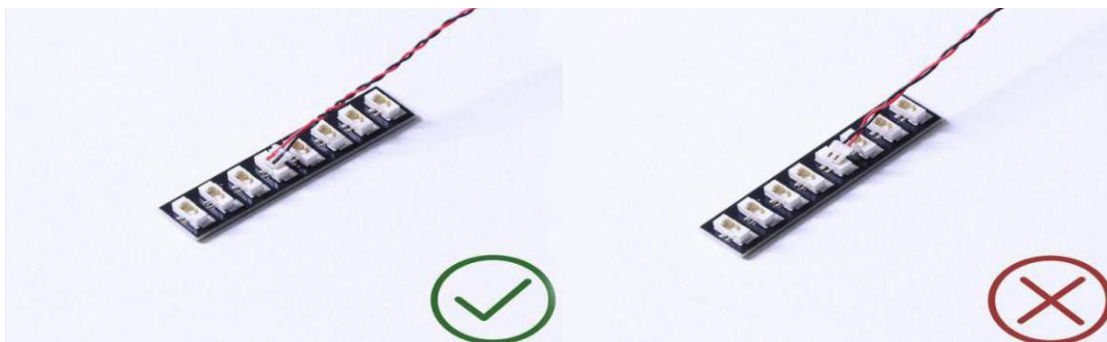
Place wires on the surface or under the building blocks.

The wire can be placed between the building blocks or under the block, but they should be placed between the studs correctly.

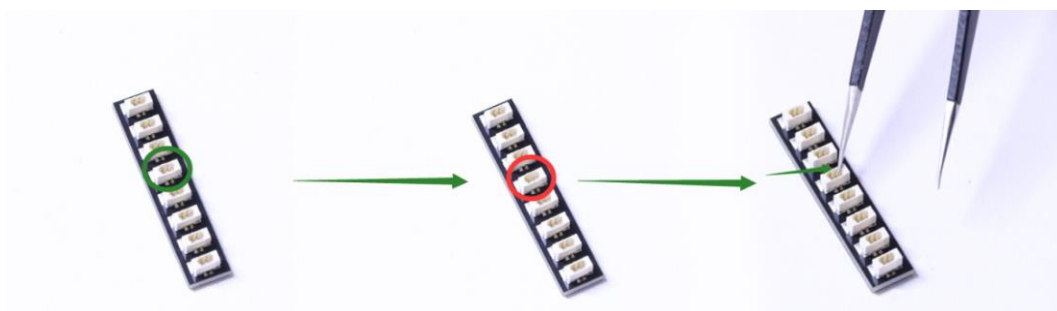


Insert the connectors to the ports.

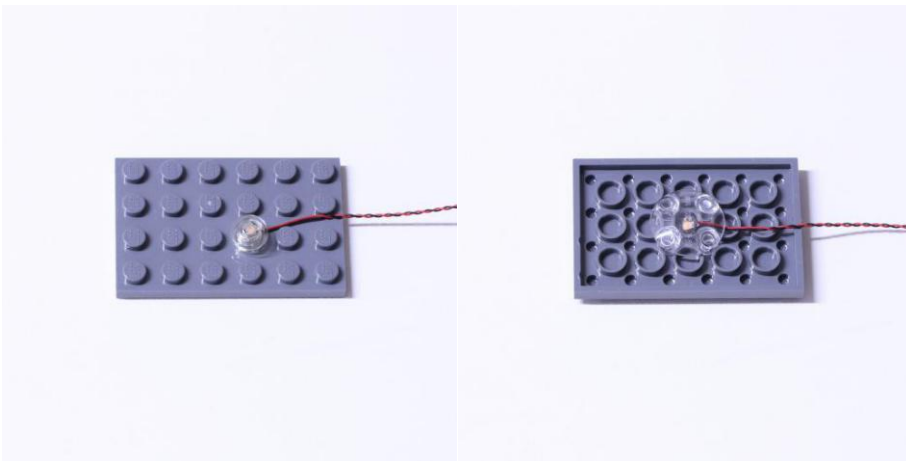
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop, and don't force it, for that may result in bent pins inside the port or overheating of the expansion board.



At this point, use the tweezers to straighten the bent pins.

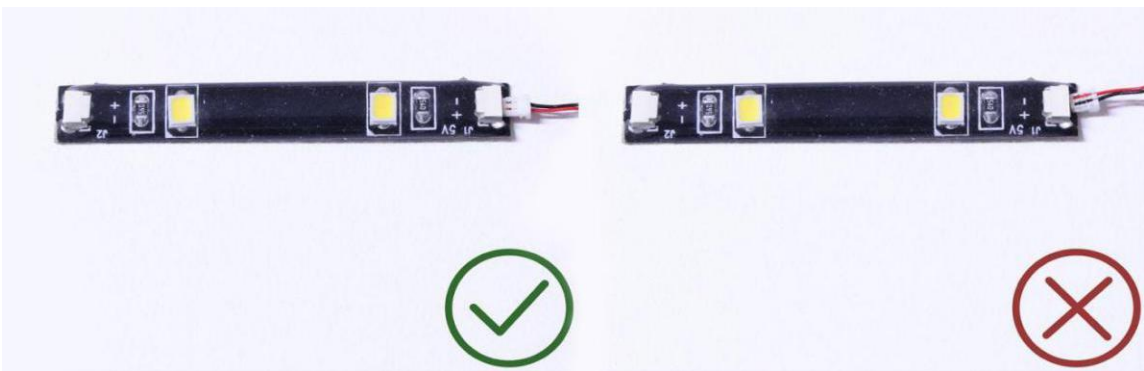


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put them either on the top of the studs or between studs.



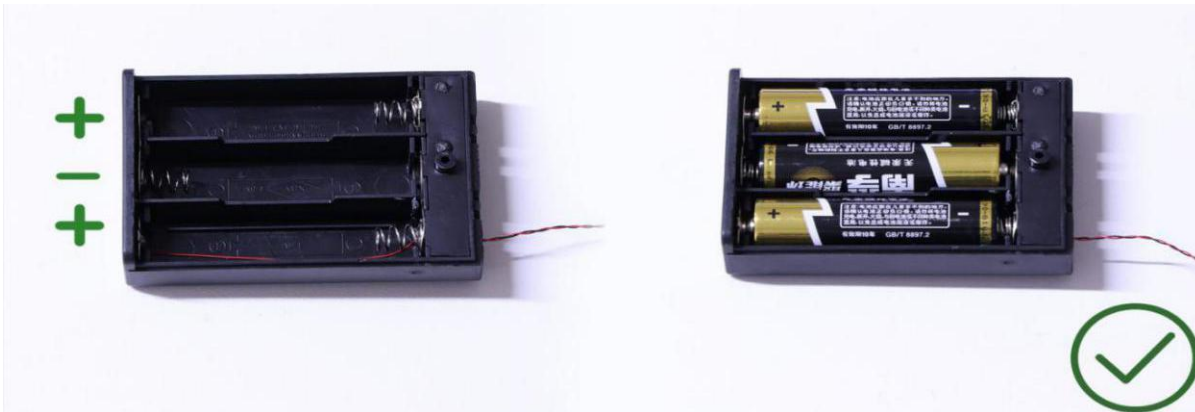
### Connecting cable connectors to Strip Lights

Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't fit easily into a port connector, don't force it. Doing so will damage the plug and the connector.



Finally, please pay attention to the positive and negative terminals of the battery when installing the battery case.





OK, Let's Begin!

## Instructions for installing this kit:

White House 21054, 8 bags in total, 7 bags with labels, 1 bag without label, as per below:

Power supply: USB cable (please bring your own power bank or mobile phone charger).

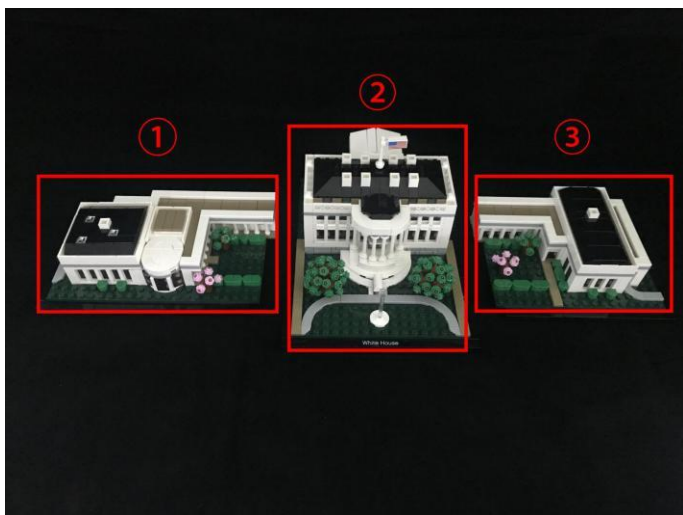


OK, Let's Begin! (you can use the tweezer if necessary.)

(Tips: the tweezer is sharp, you should be careful when using it, do not hurt yourself or scratch the pieces; be gentle and do not wear the cables.)



Divide the white house into 3 parts as per below.

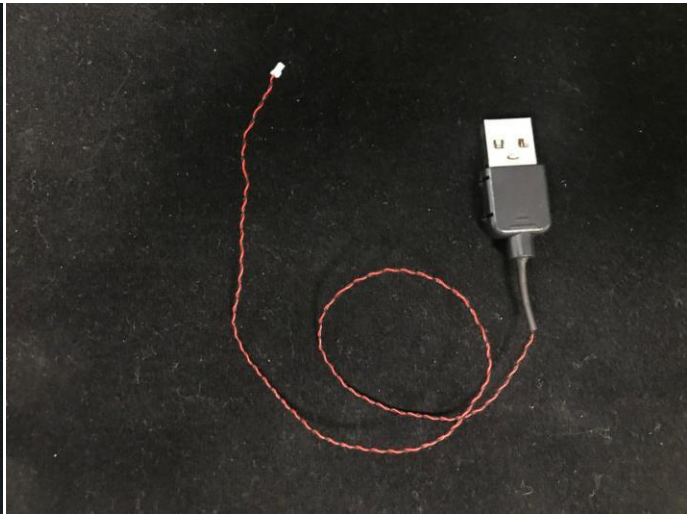


Take a warm white 30cm head light.

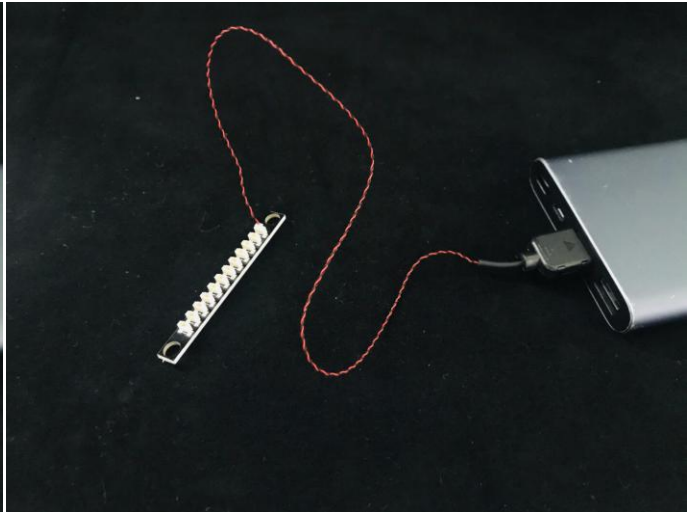
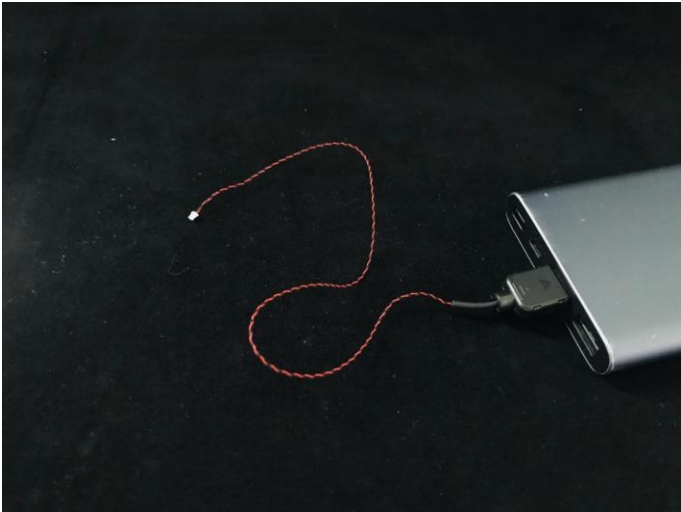




Take a 12-port expansion board, a USB cable.



Connect the USB cable (with power bank connected) to the expansion board.



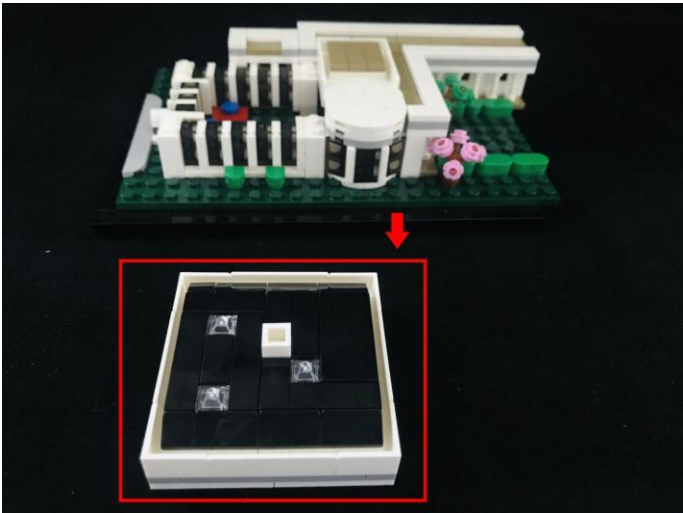
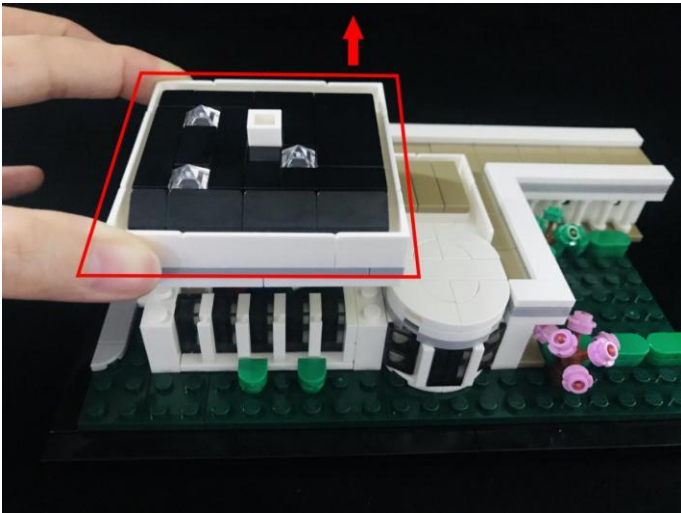
Connect the head light to the expansion board, and test the light as per below.



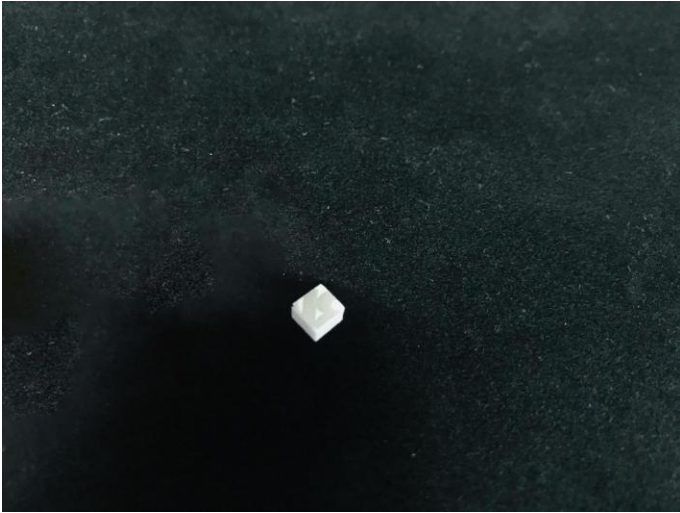
(After the test, disconnect the cable, keep the USB cable and the cable of the expansion board connected to the power bank as per below) .  
Take the number ① part, as per below.



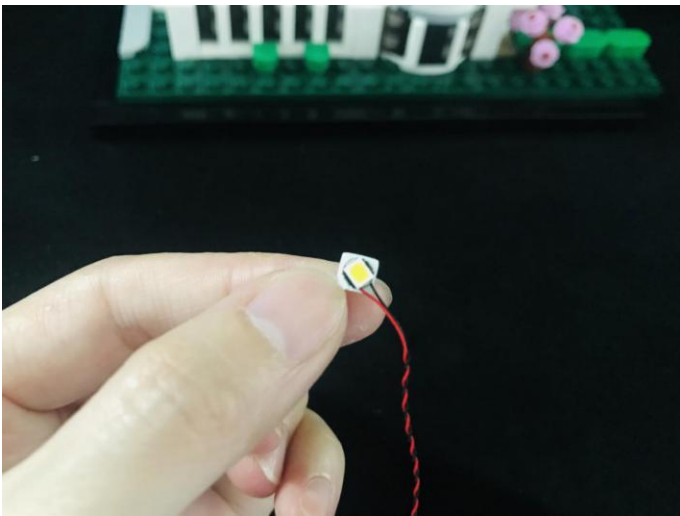
Remove the black roof piece as per below.



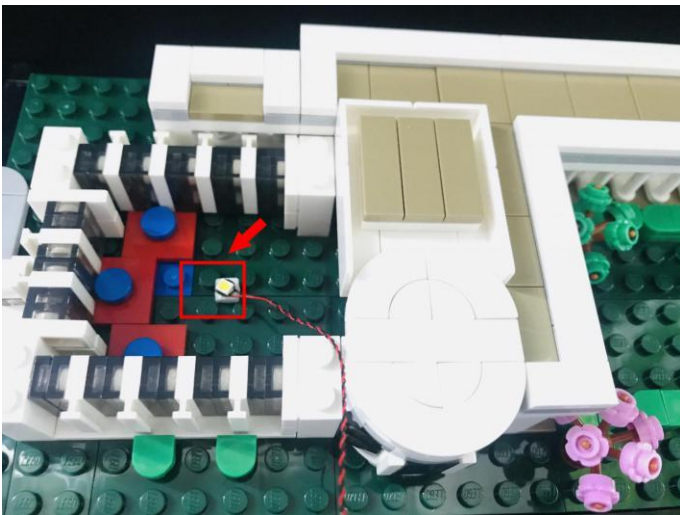
Take an adhesive square.



With lighting part facing up, stick the head light we tested before to the adhesive square.

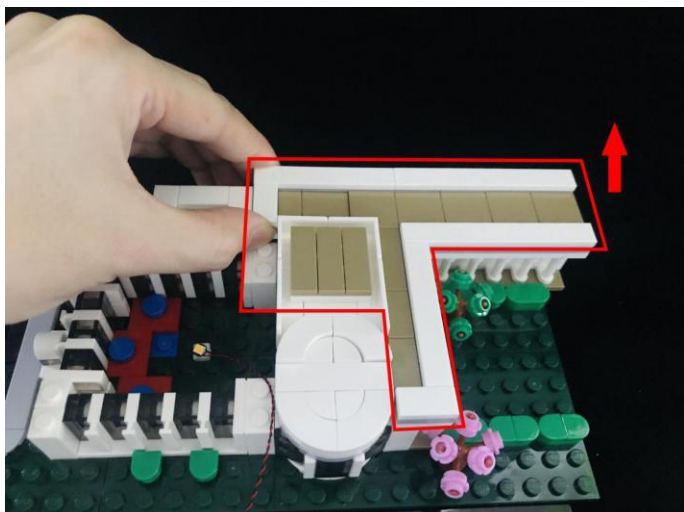


Stick the other side of the adhesive square to the following place marked in red.

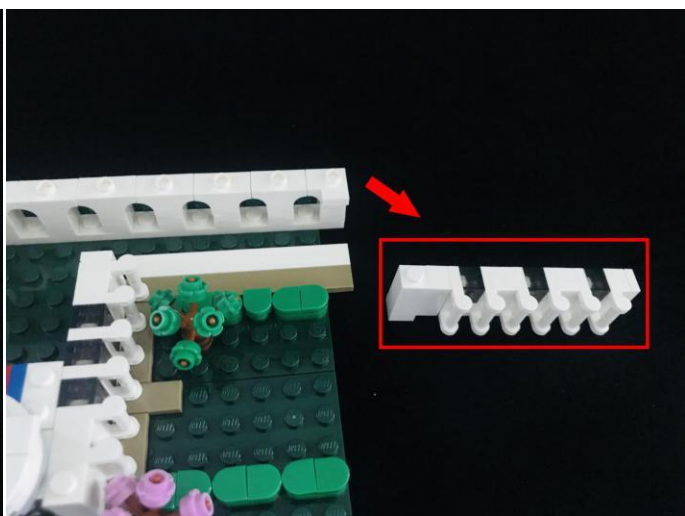
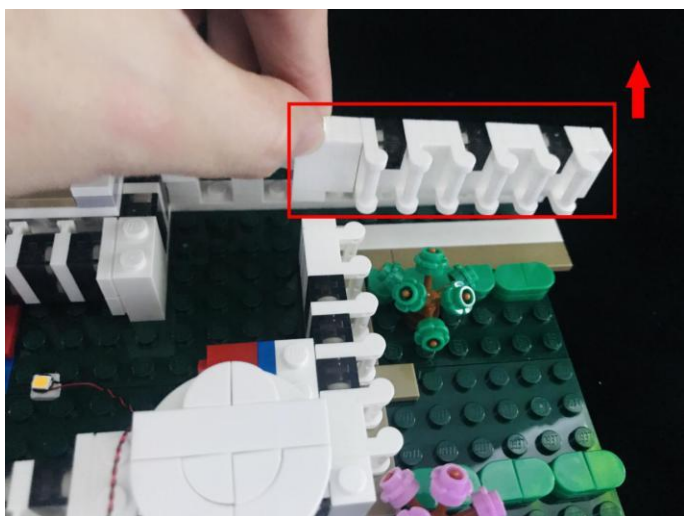


Follow the arrow, disconnect the dark yellow piece as per below.

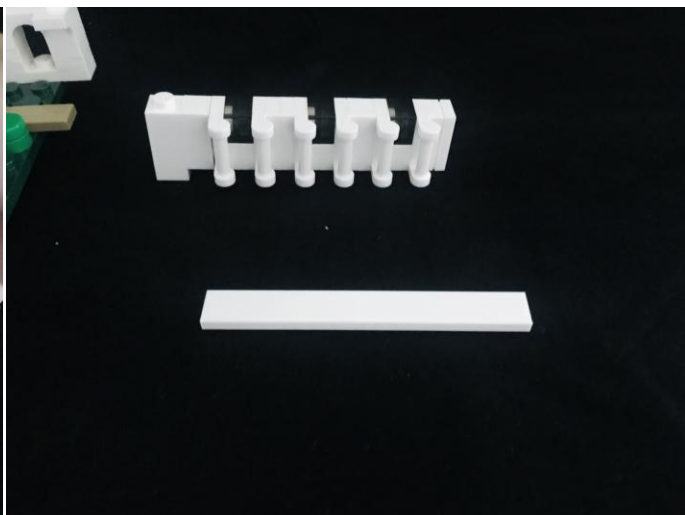
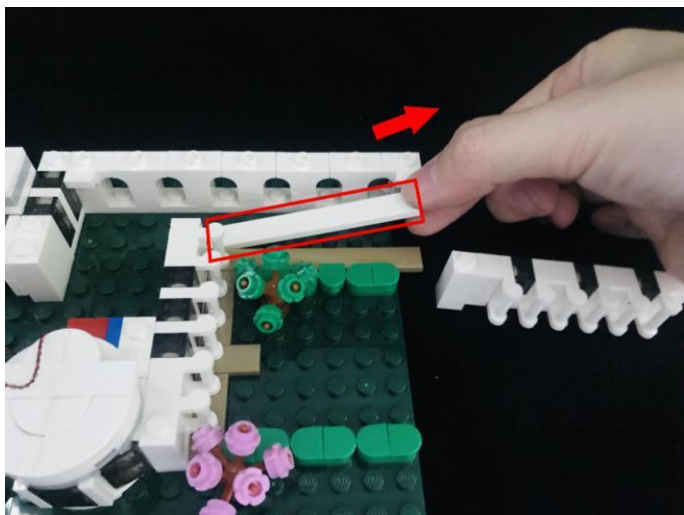




Follow the arrows. Continue to disconnect the following white piece.



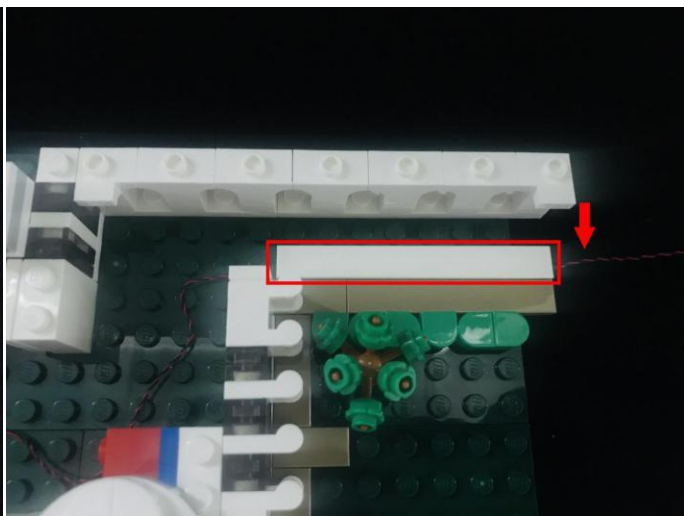
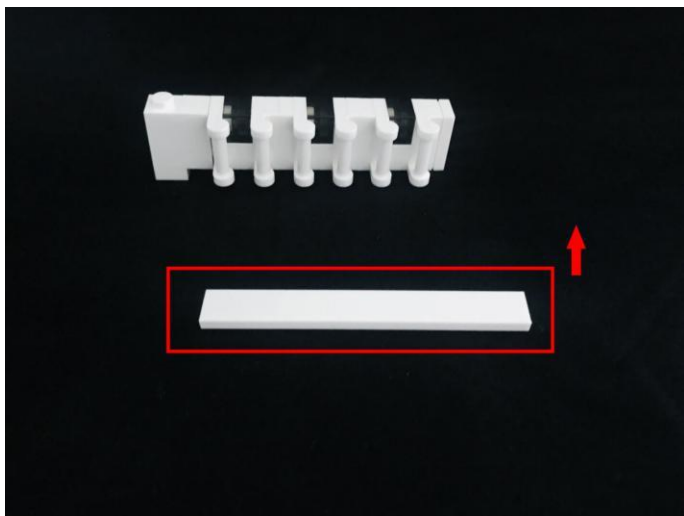
Remove the following 1x8 white plate.



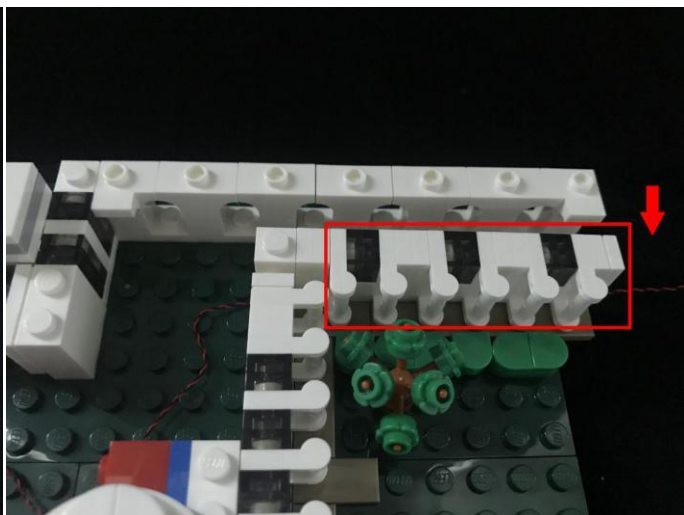
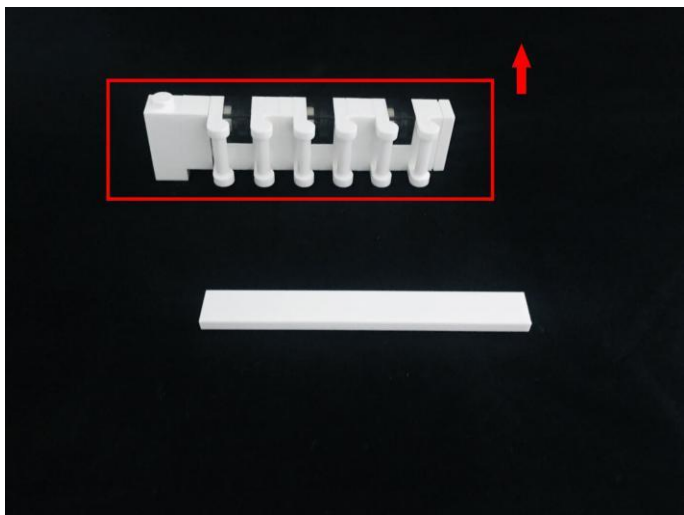
Follow the arrows, place the cable of the head light.



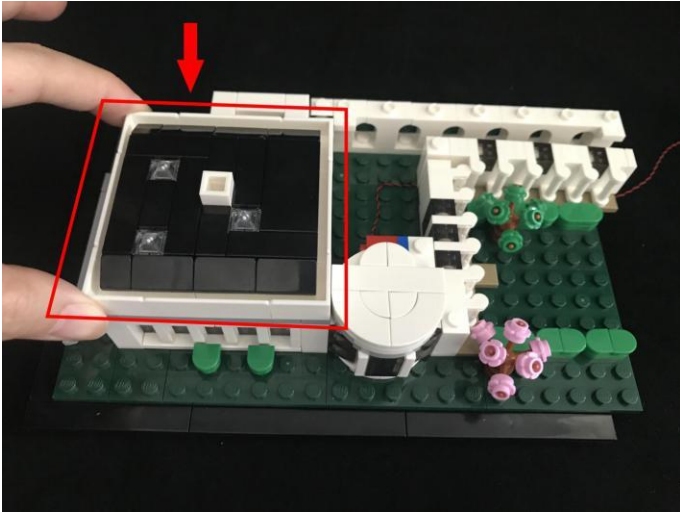
Reconnect the white 1x8 plate.



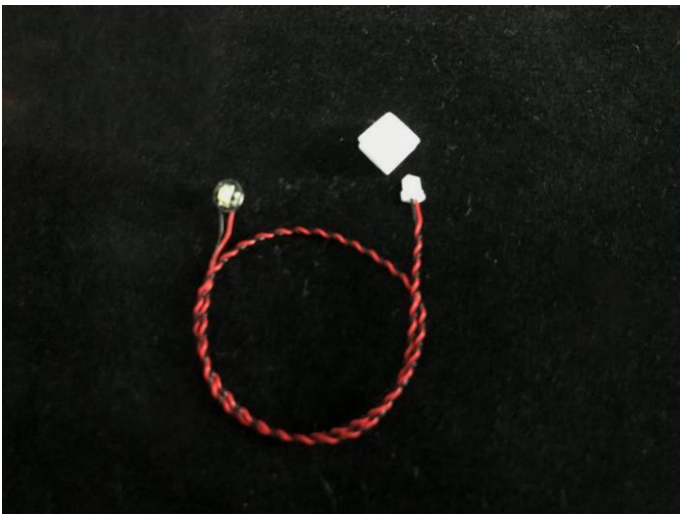
Reconnect the following white piece.



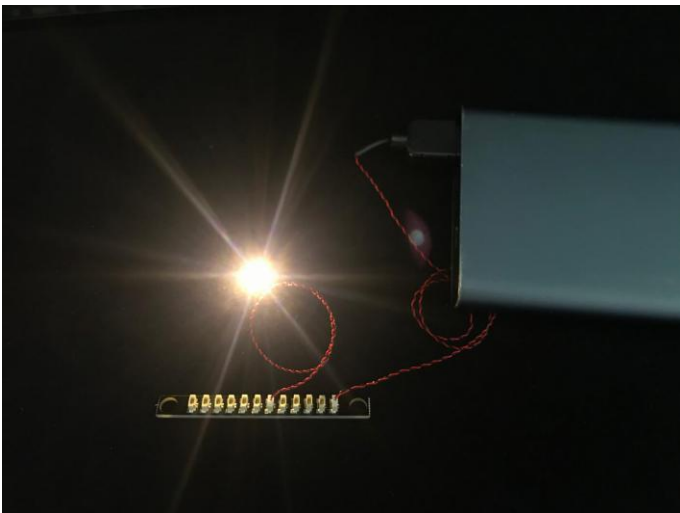
Reconnect the black roof piece.



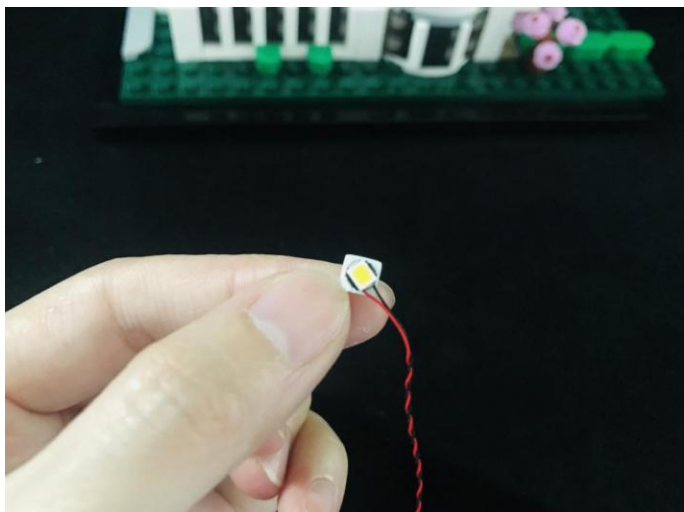
Take a warm white 30cm dot light, an adhesive square.



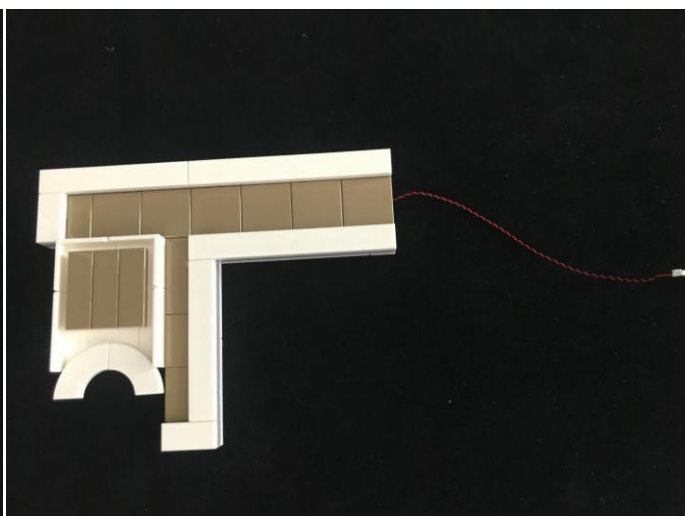
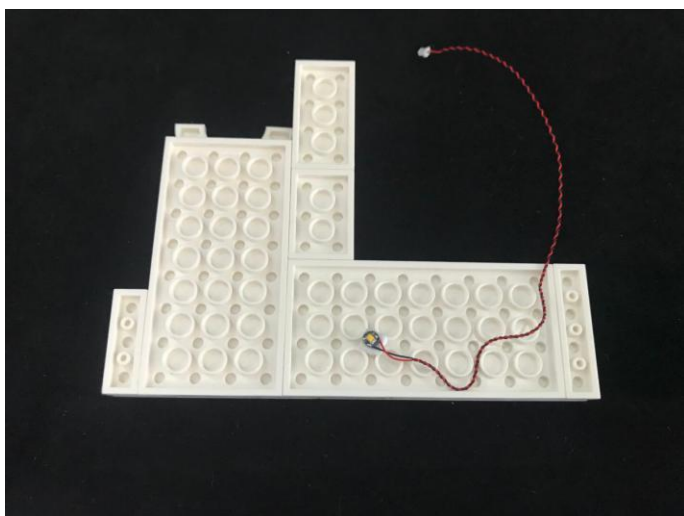
Connect the cable to the expansion board, and test the light.



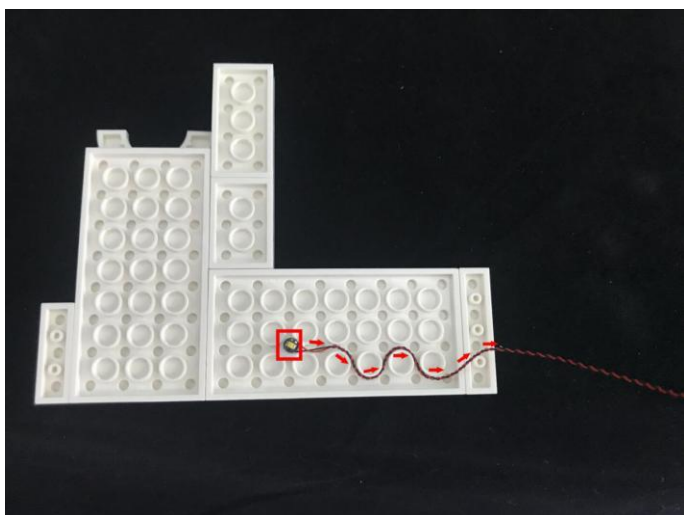
(After the test, disconnect the cable, keep the USB cable and the cable of the expansion board connected to the power bank as per below.)  
With lighting part facing up, stick the light to the adhesive square.



Turn the dark yellow piece over, connect the light to the piece as per below.

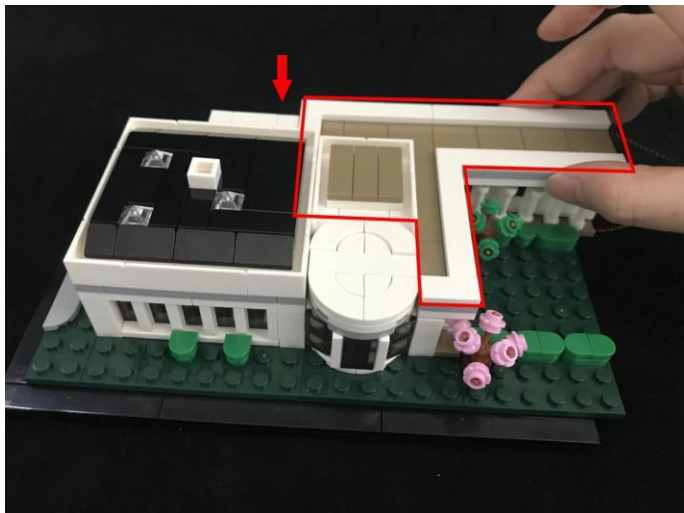


Follow the red arrows, place the cable as per below.

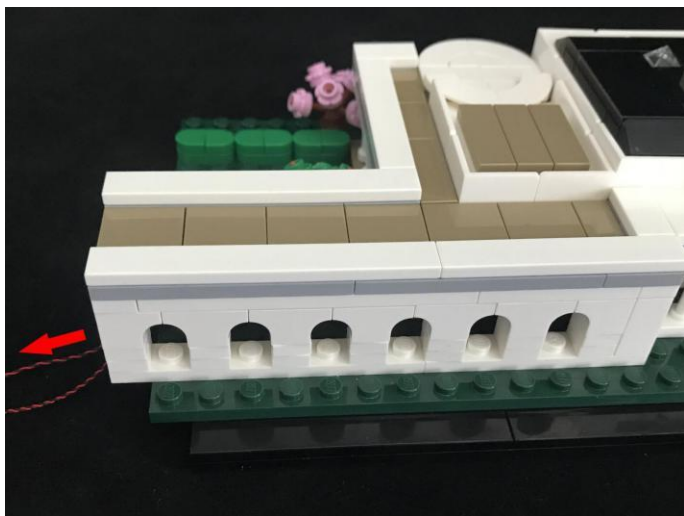


Reconnect the dark yellow roof piece.





Place the cable as per below.

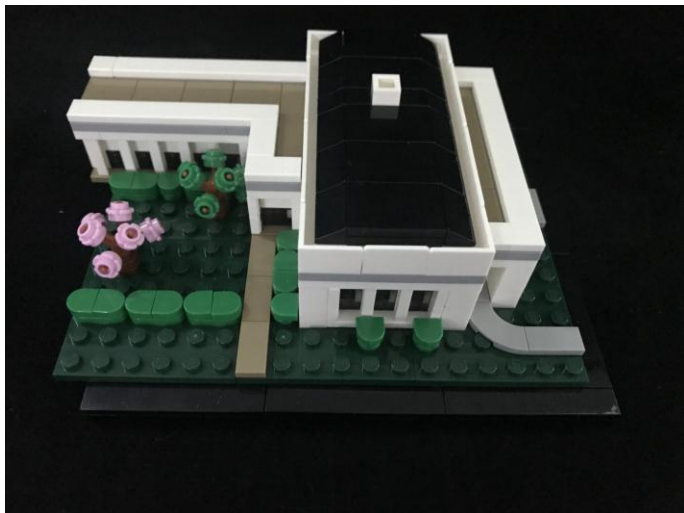


Connect the cable to the expansion board (which is connected to the power bank), and verify the light.

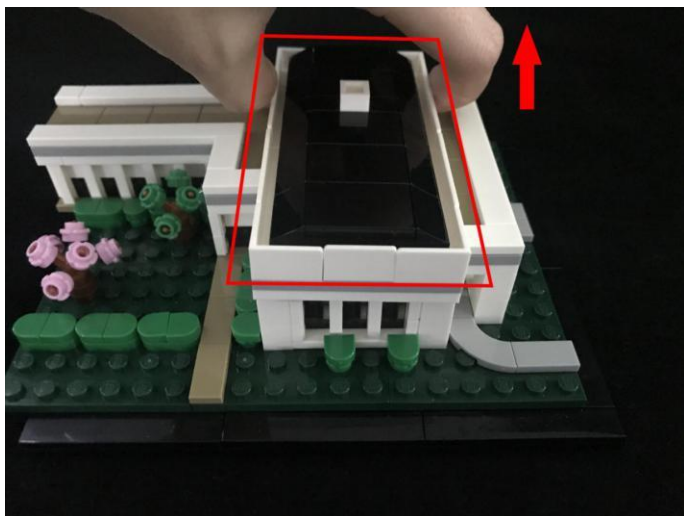


Take the number ③ part.

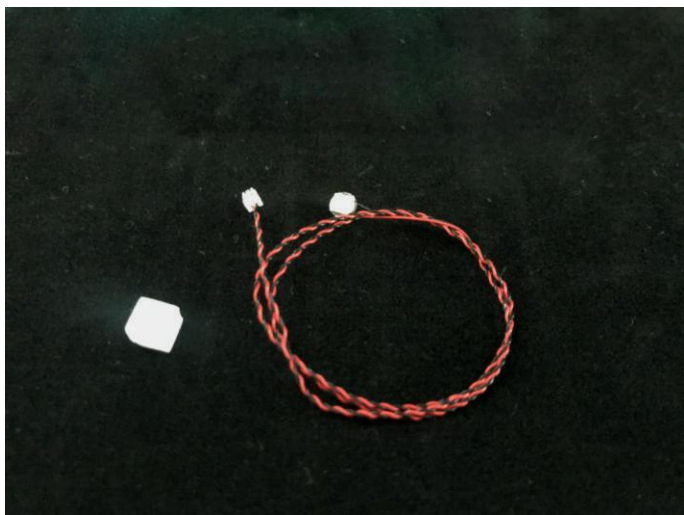




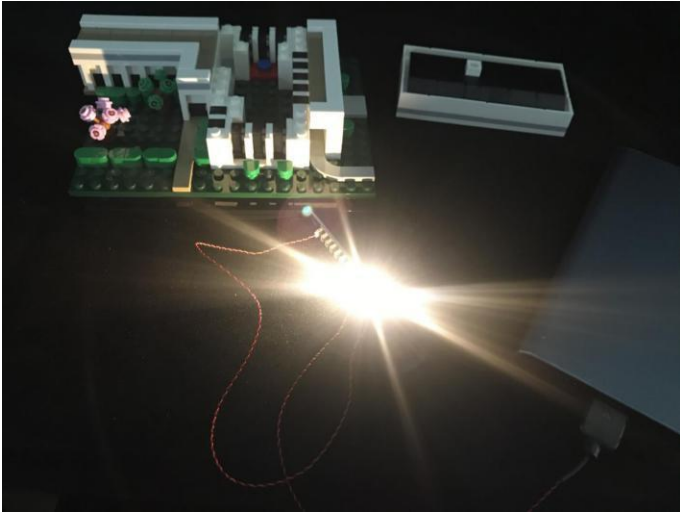
Remove the black roof piece as per below.



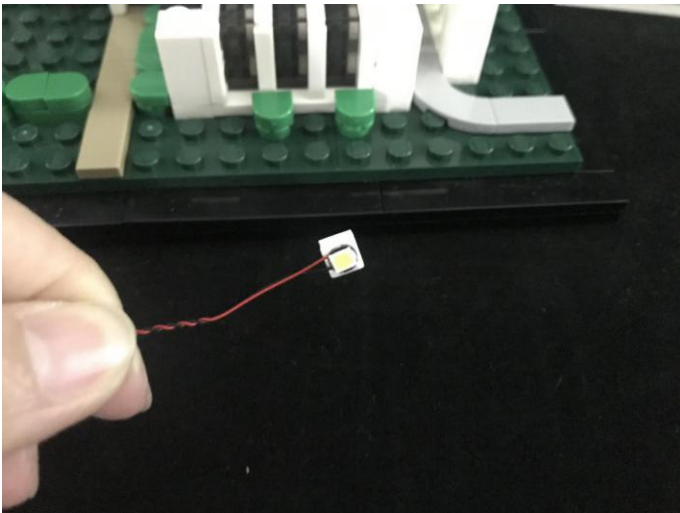
Take a warm white 30cm dot light, an adhesive square.



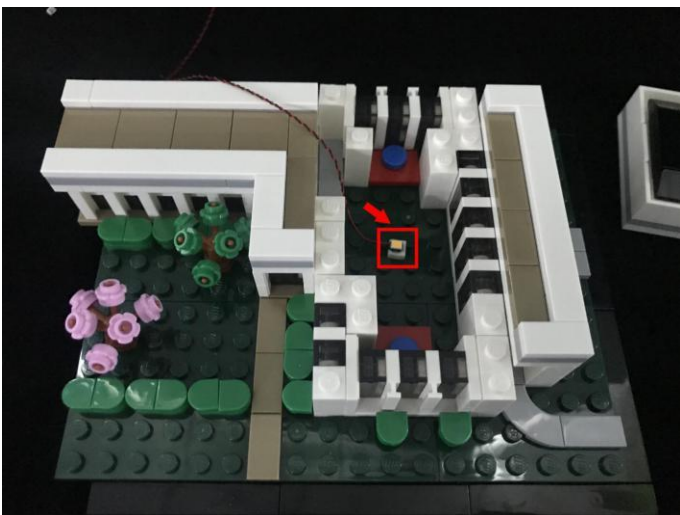
Connect the cable to the expansion board, and verify it.



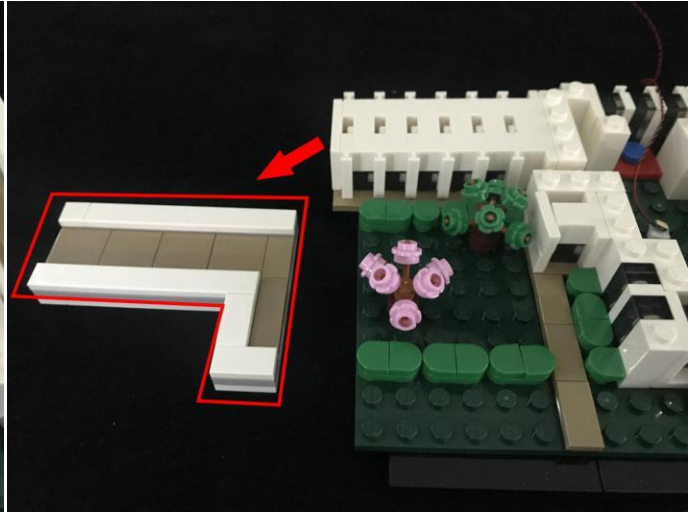
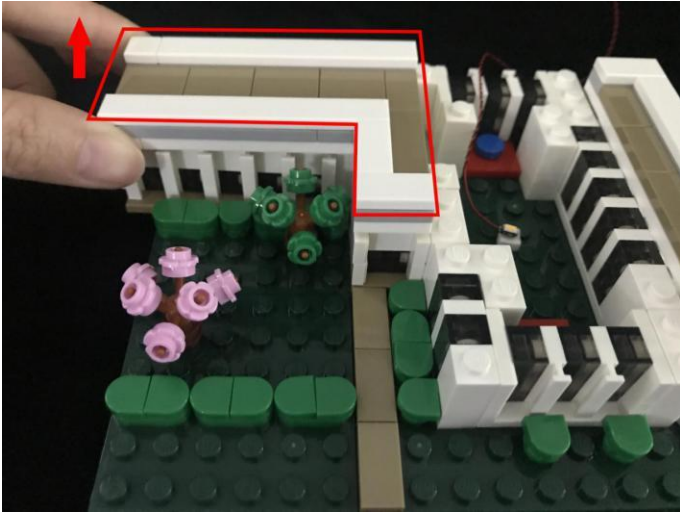
(After the test, disconnect the cable, keep the USB cable and the cable of the expansion board connected to the power bank as per below) .  
With lighting part facing up, connect the light to the adhesive square.



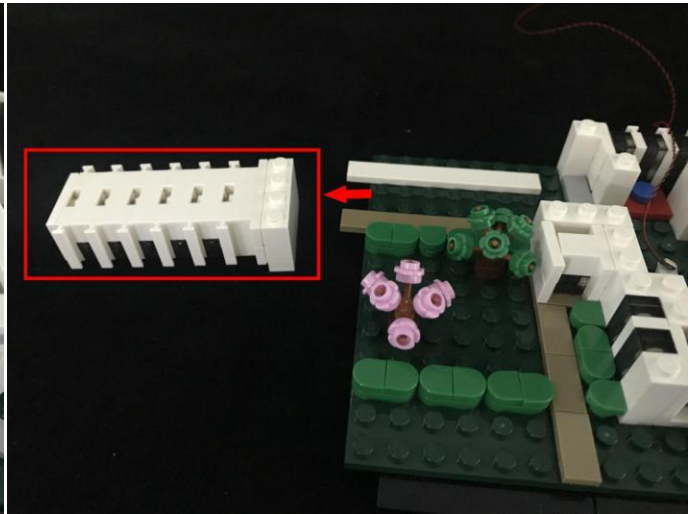
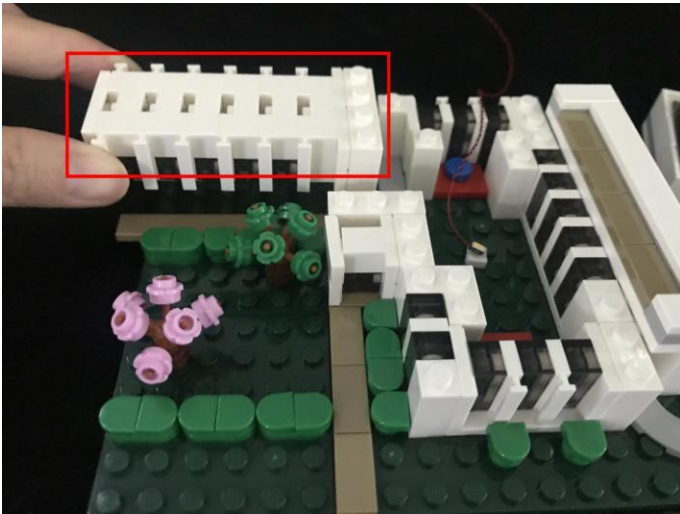
Stick the light to the following place marked in red.



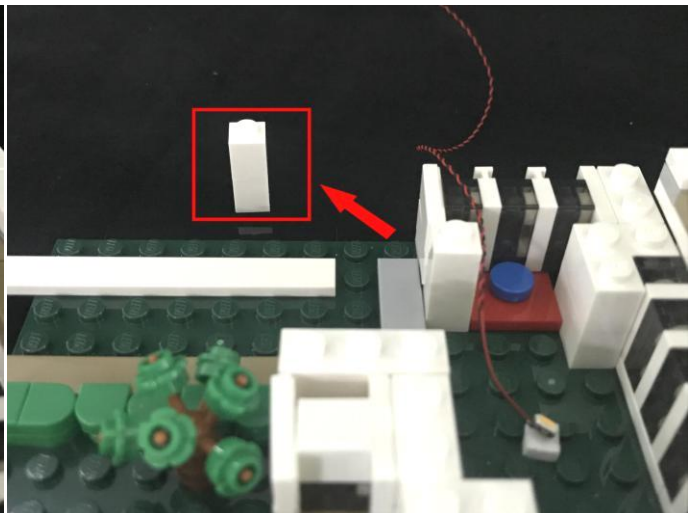
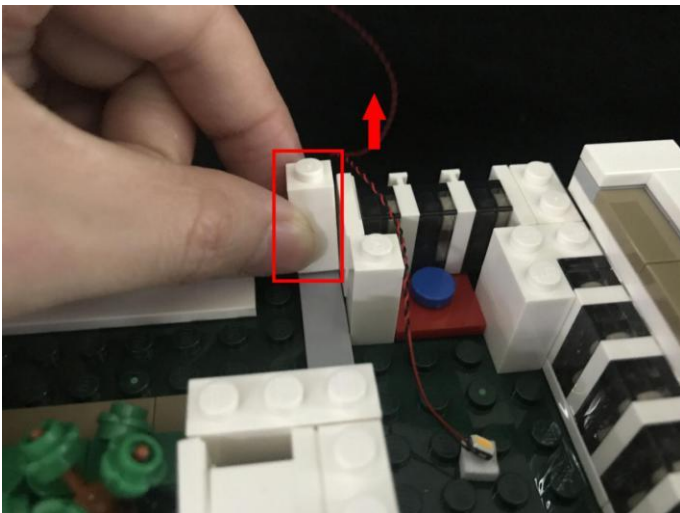
Disconnect the dark yellow piece.



Disconnect the white piece.

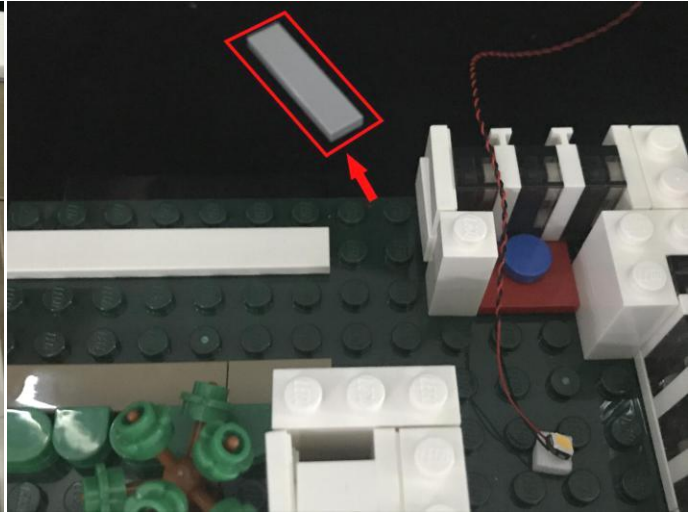
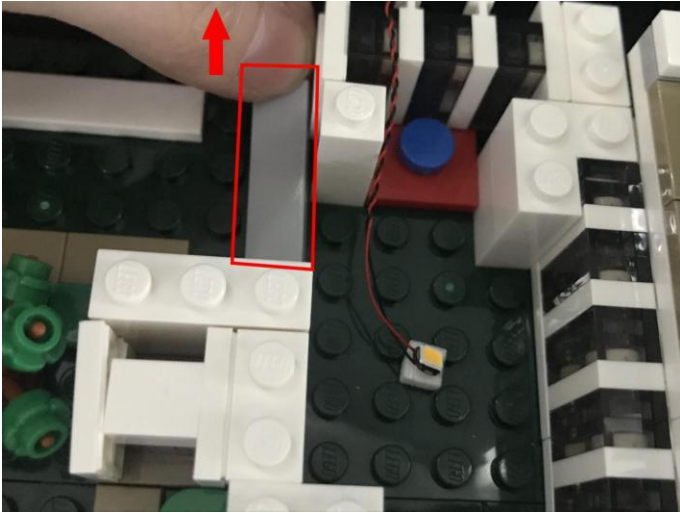


Continue to disconnect the following white piece.

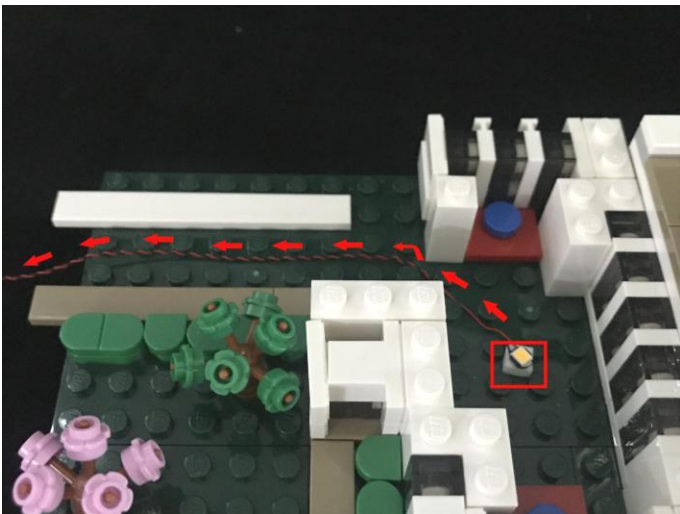


Disconnect the 1x4 gray plate.

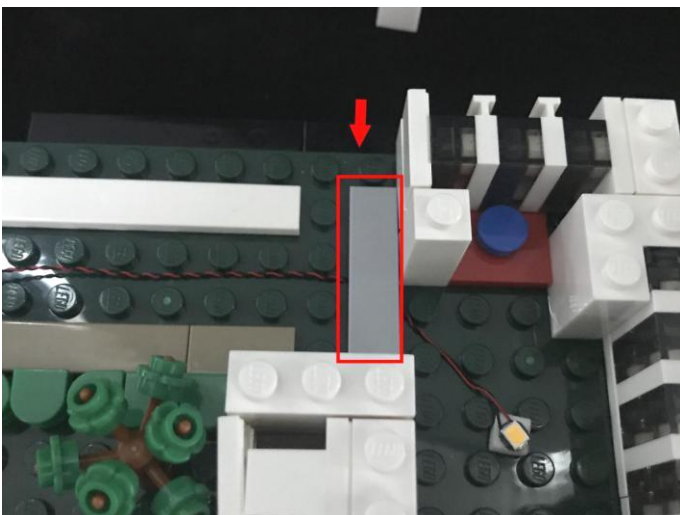




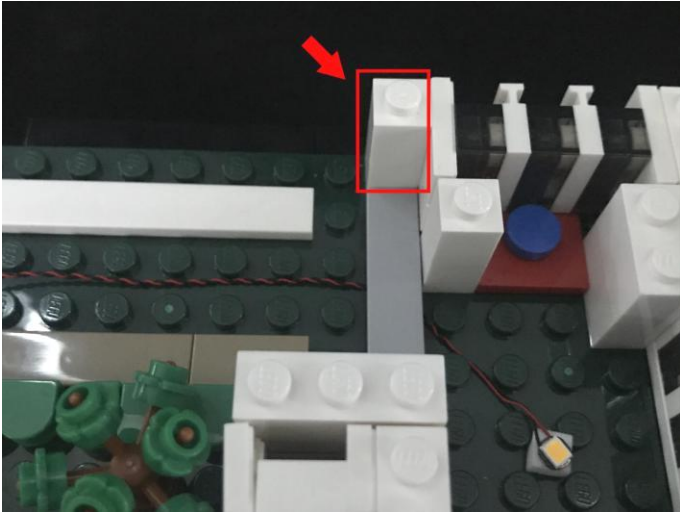
Follow the red arrows, place the cable as per below.



Reconnect the gray 1x4 plate.



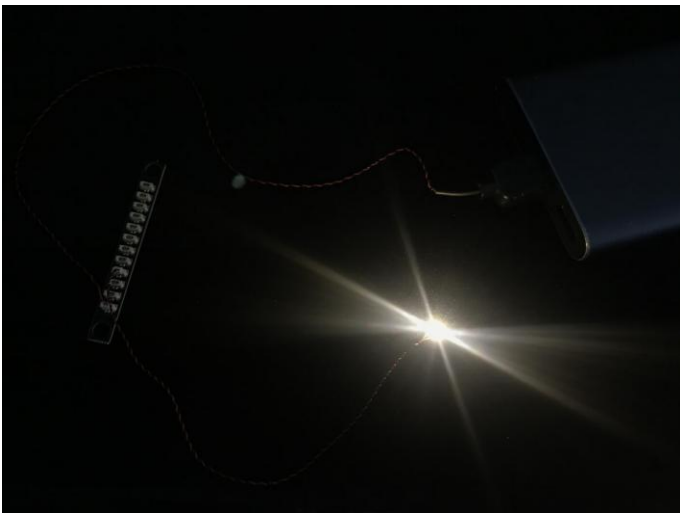
(Because of the cable, there' s space between pieces, in case of breaking the cable, do not press them too hard) .  
Reconnect the white pillar.



Take a warm white 15cm dot light, an adhesive square.

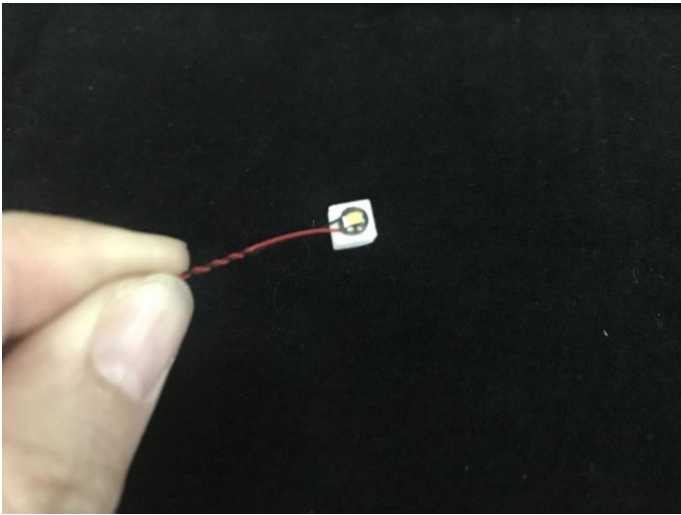


Connect the cable to the expansion board, and verify the light.

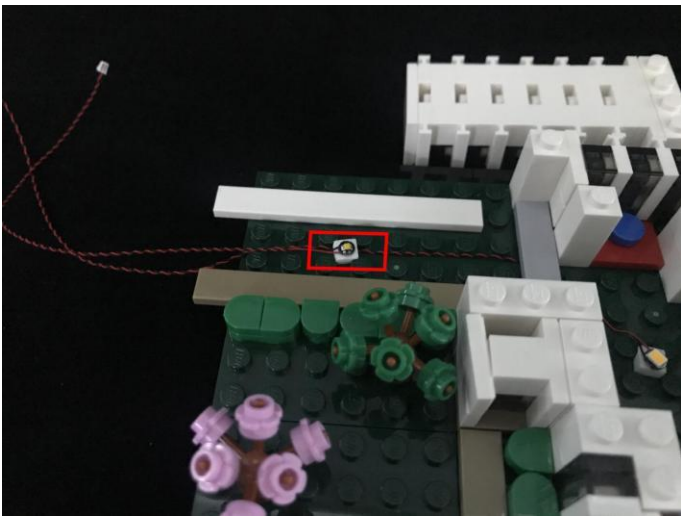


(After the test, disconnect the cable, keep the USB cable and the cable of the expansion board connected to the power bank as per below) .  
With lighting part facing up, stick the light to the adhesive square.

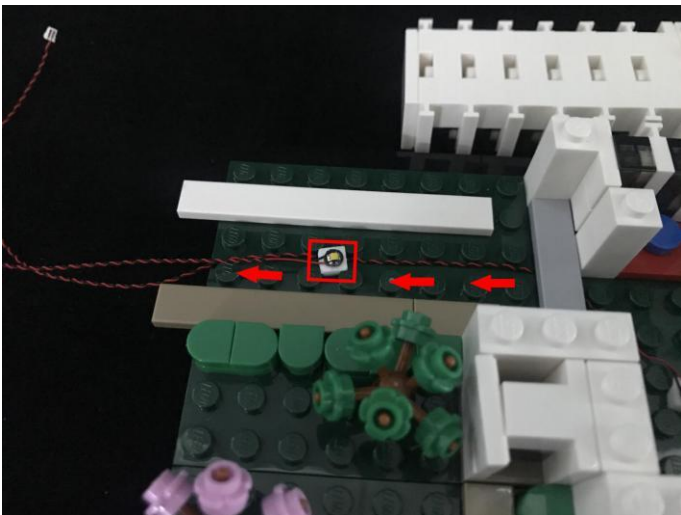




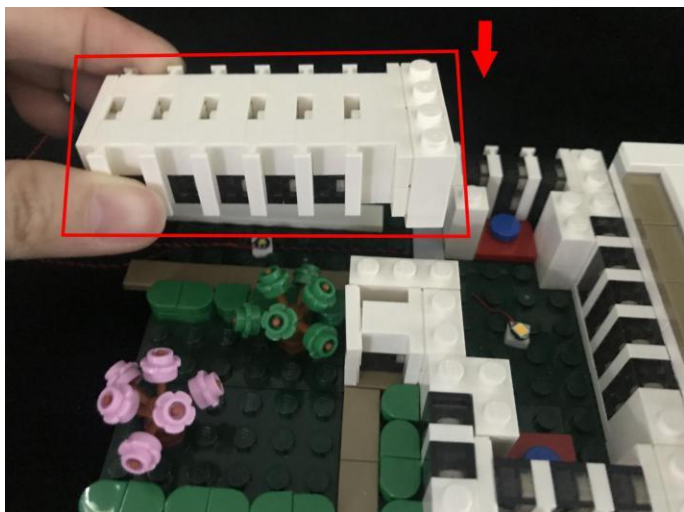
Stick the light to the following place on the green ground.



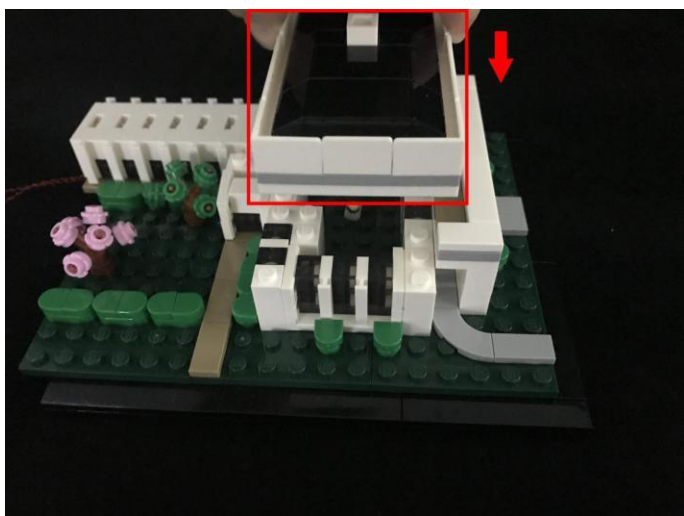
Place the 2 cables as per below.



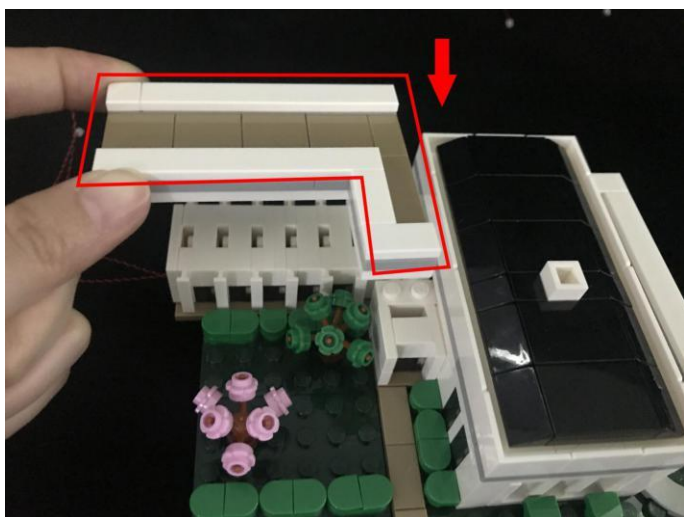
Reconnect the following white piece.



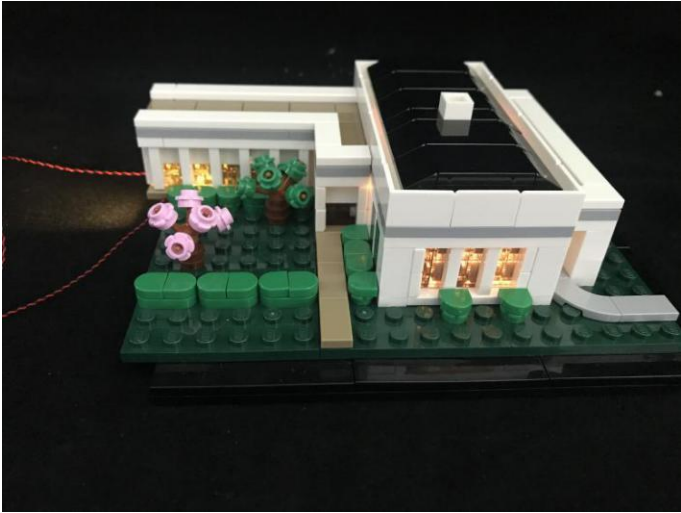
Reconnect the black piece.



Continue to reconnect the dark yellow piece.



Connect the cable of the light to the expansion board, and test the light.



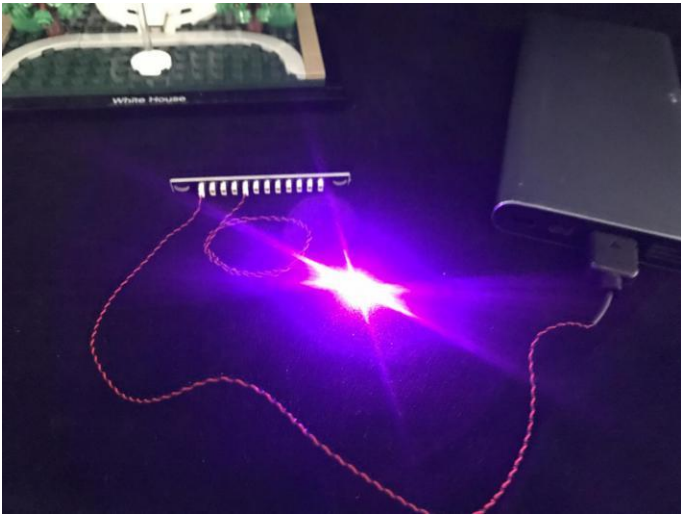
Take the number ② part.



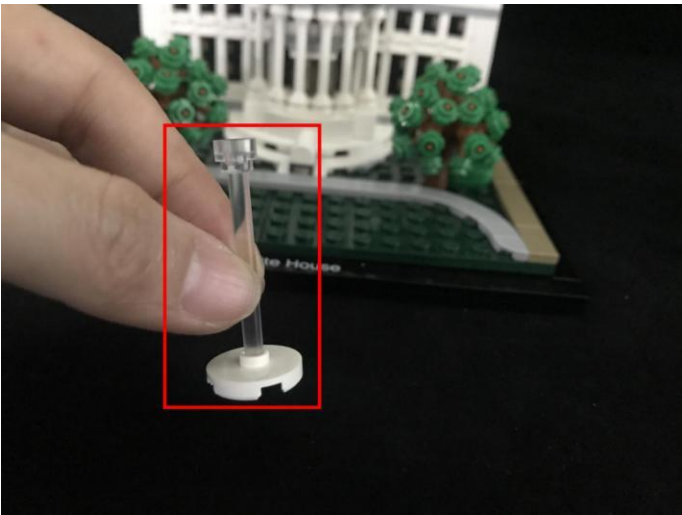
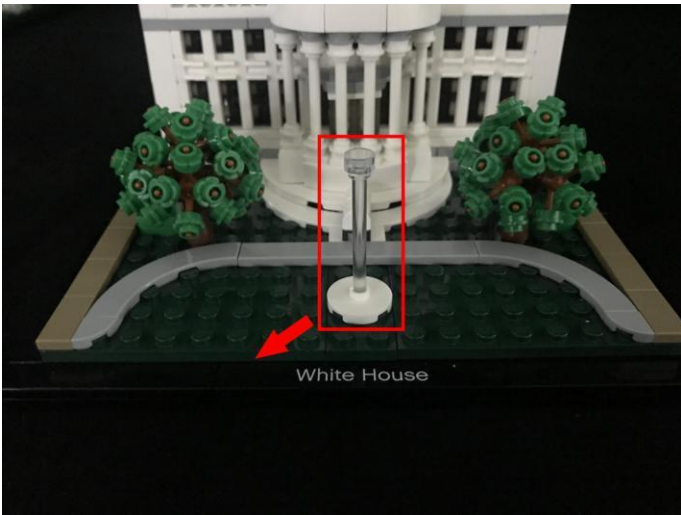
Take the 30cm flashing multi colour light.



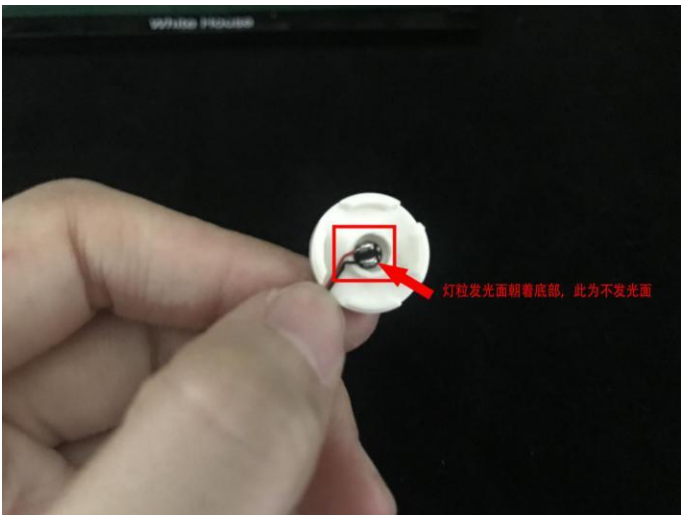
Connect it to the expansion board, and test the light.



(After the test, disconnect the cable, keep the USB cable and the cable of the expansion board connected to the power bank as per below) .  
Disconnect the fountain.

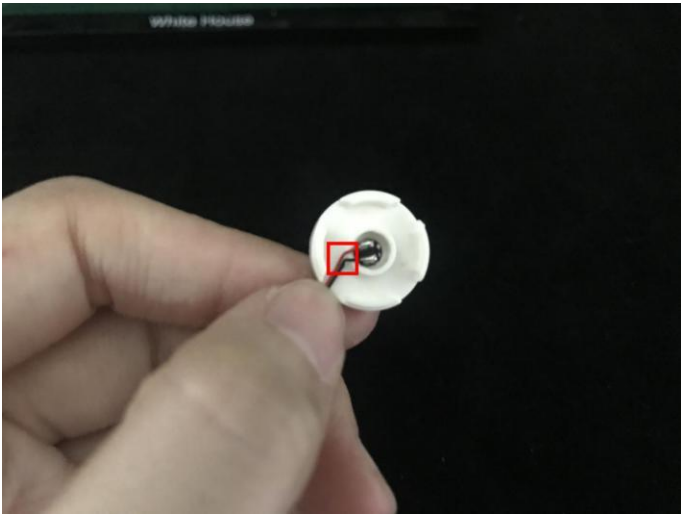


With lighting part facing the bottom of the fountain.

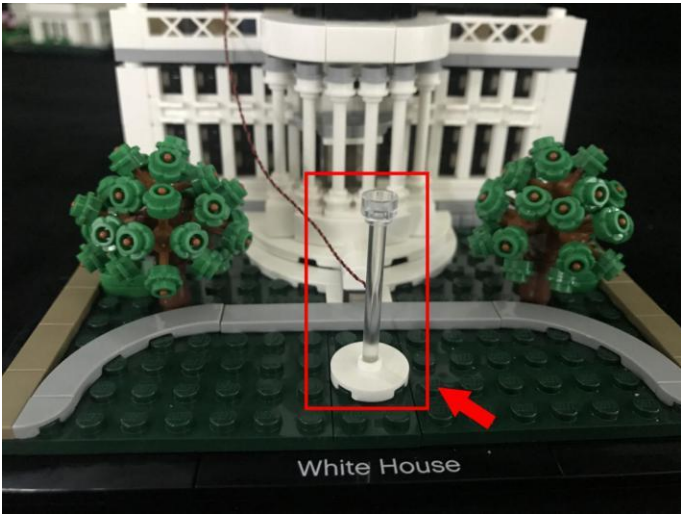


Place the light as per below.

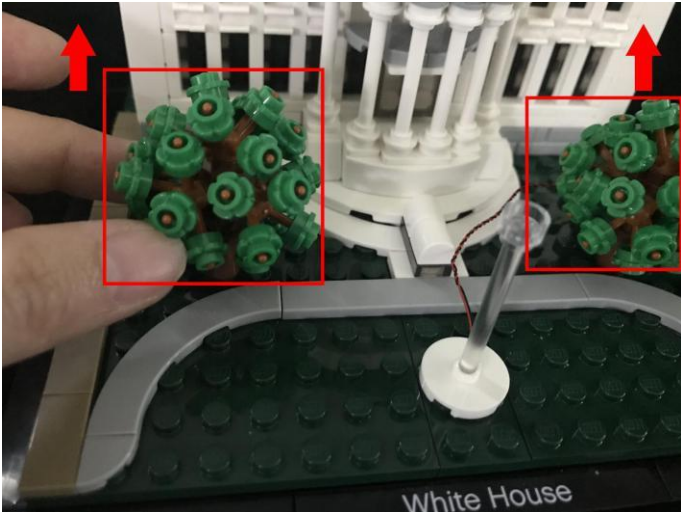




Reconnect the fountain (do not press the cable too hard).

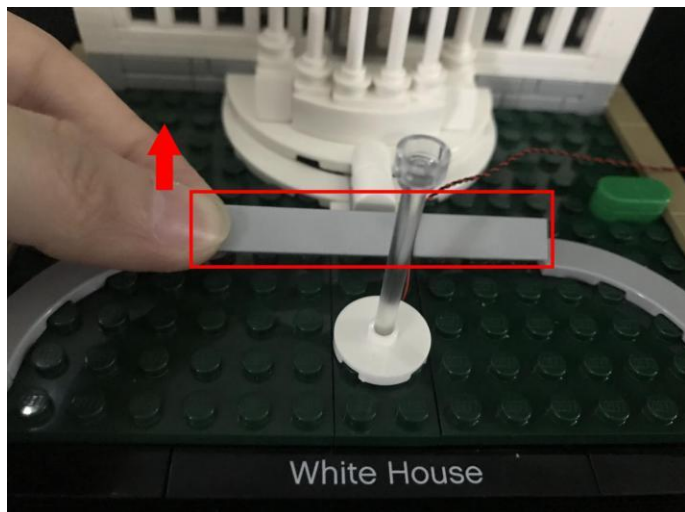


Remove the trees as per below.

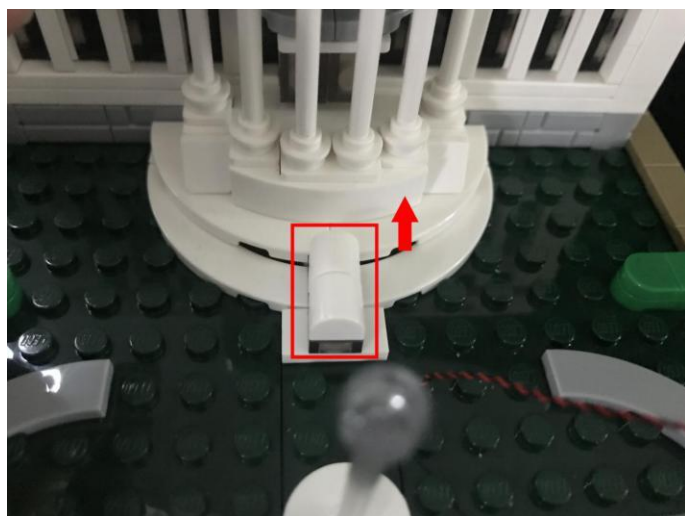


Remove the 1x8 gray plate.

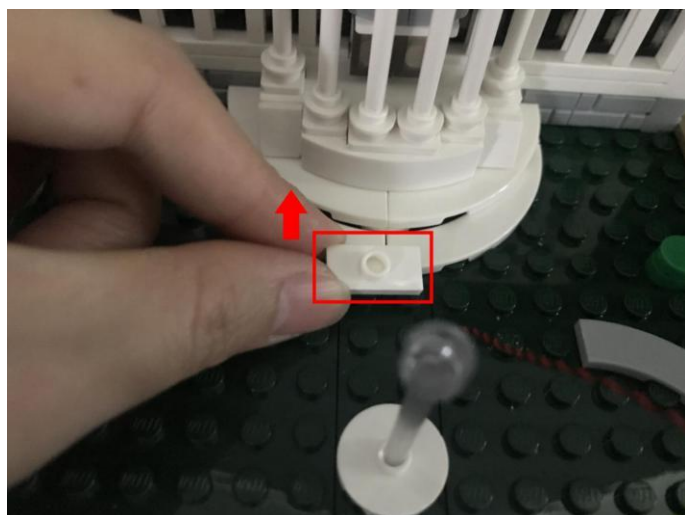




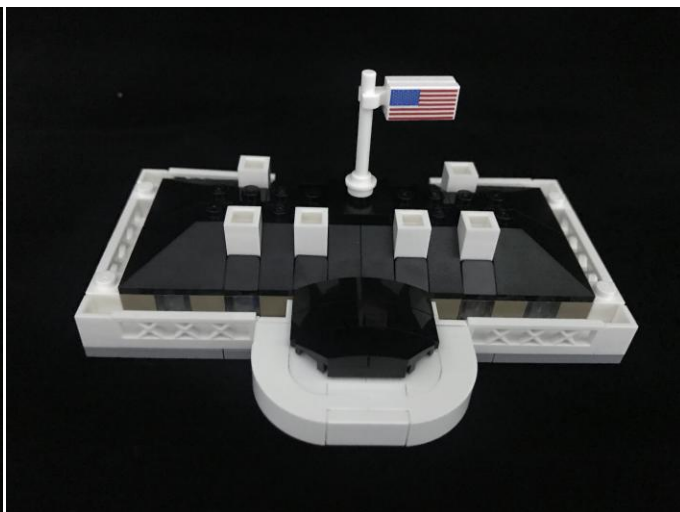
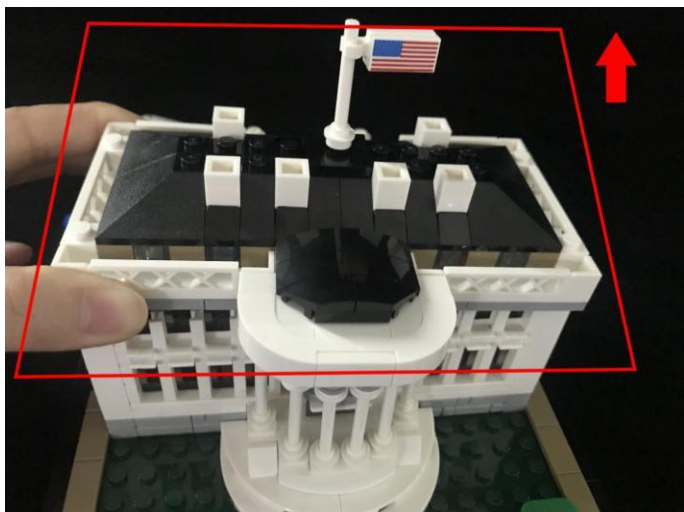
Disconnect the following white piece.



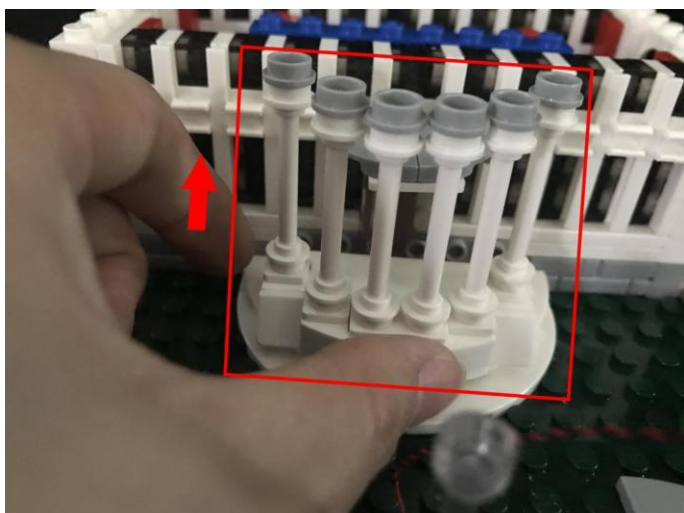
Move onto removing the following white piece.



Disconnect the following black piece with flag.



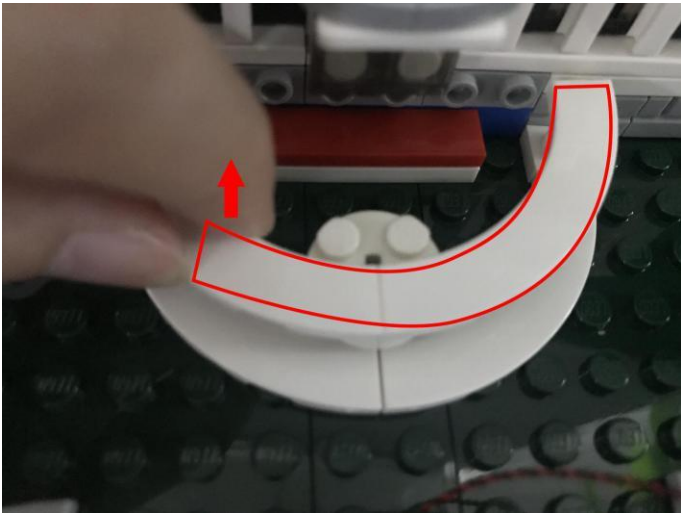
Disconnect the following pillars.



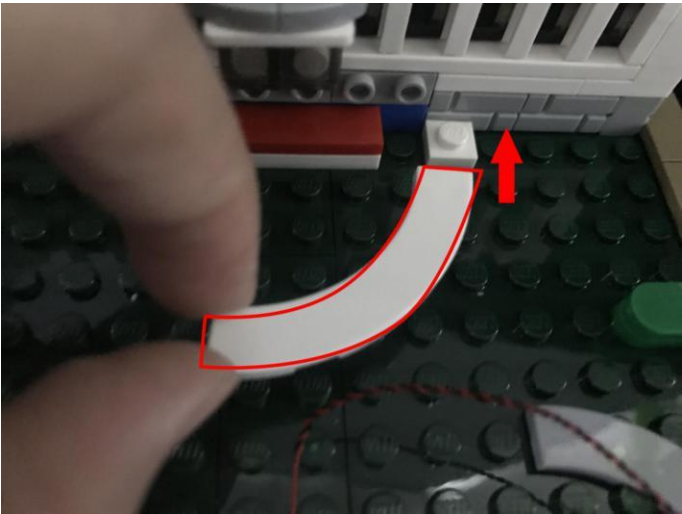
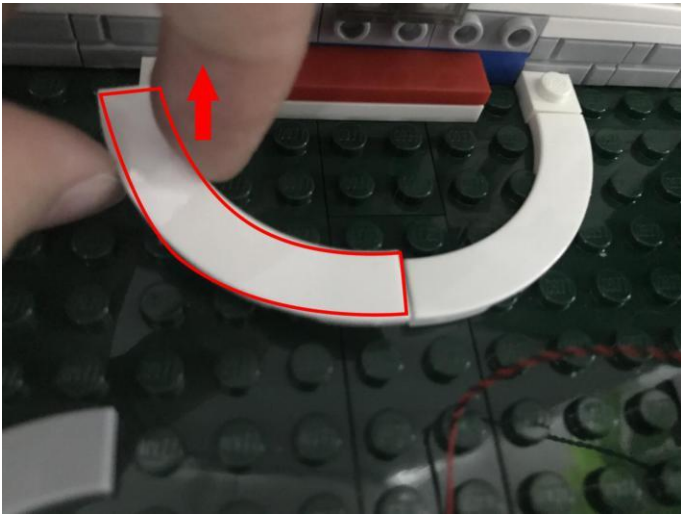
Disconnect the white roof.



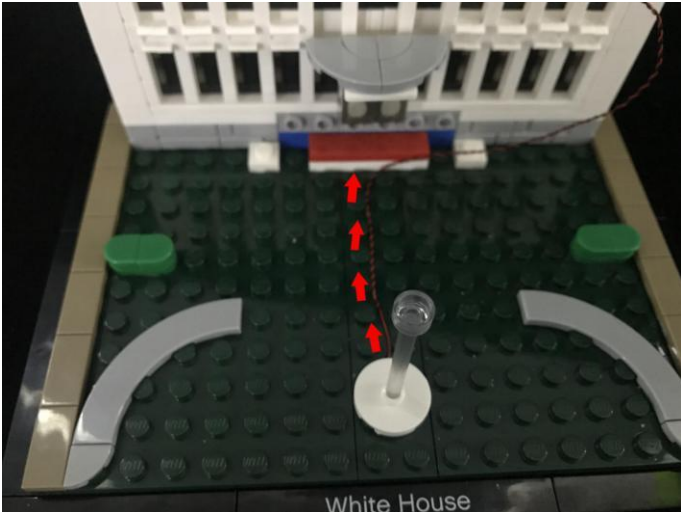
Remove the following half circle step from the first floor.



Continue to remove the following half circle from the second floor.

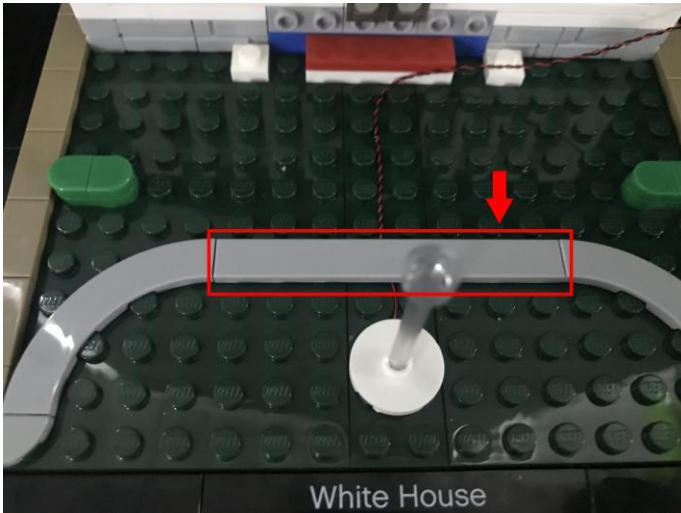


Follow the arrows, place the cable as per below.

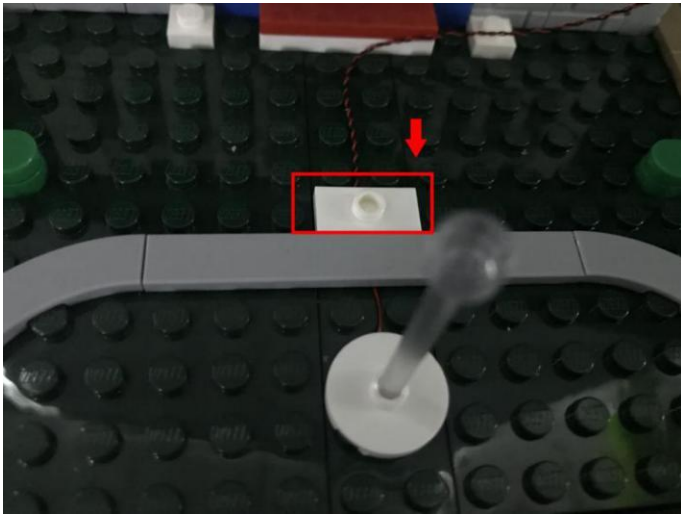


Reconnect the gray 1x8 plate.

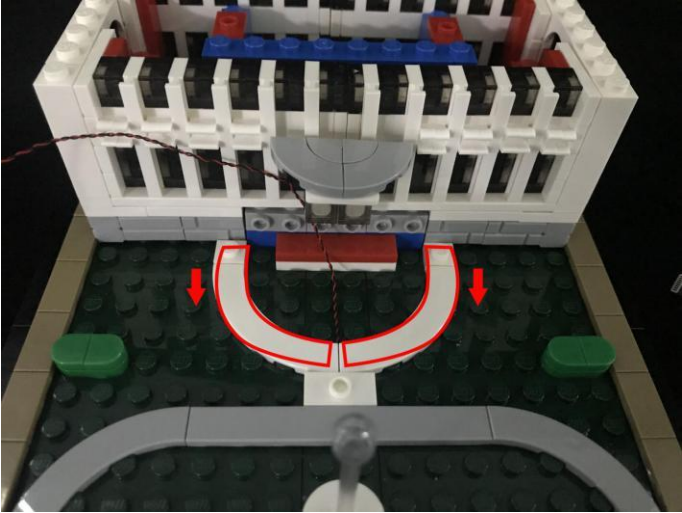
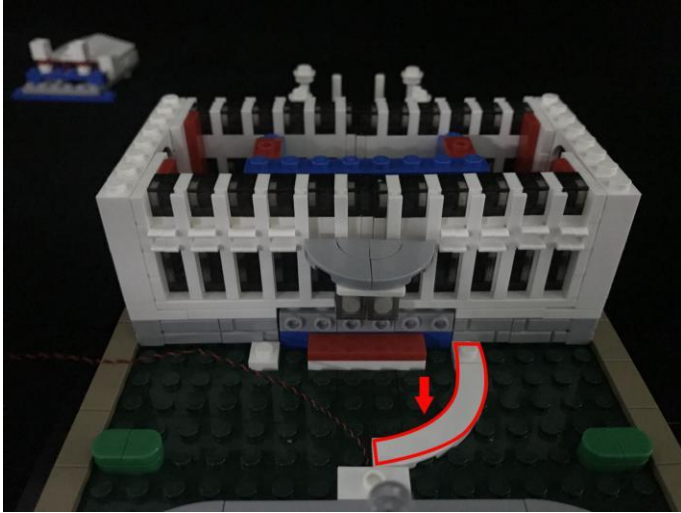




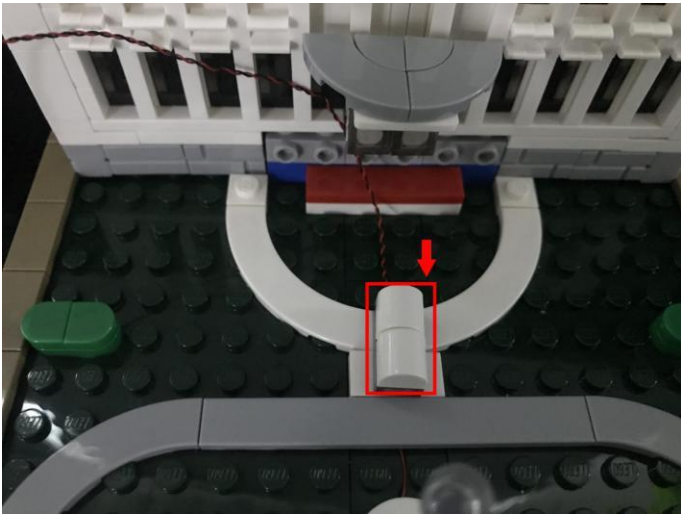
Reconnect the following white piece.



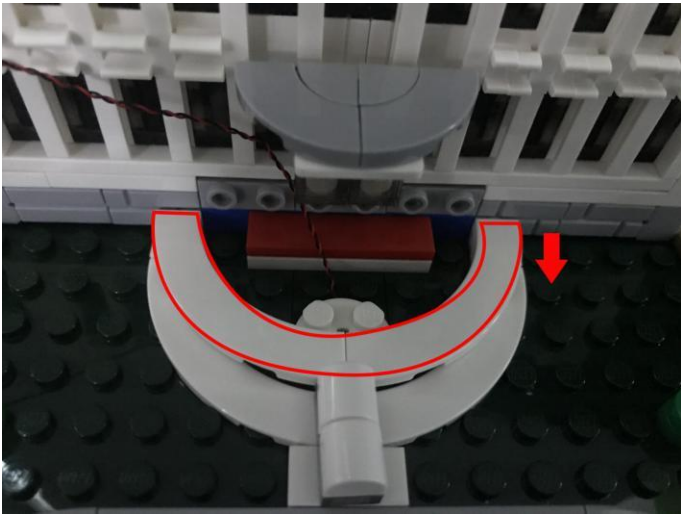
Move onto reconnecting the half circle piece to the second floor.



Reconnect the following piece.



Reconnect the step to the first floor.

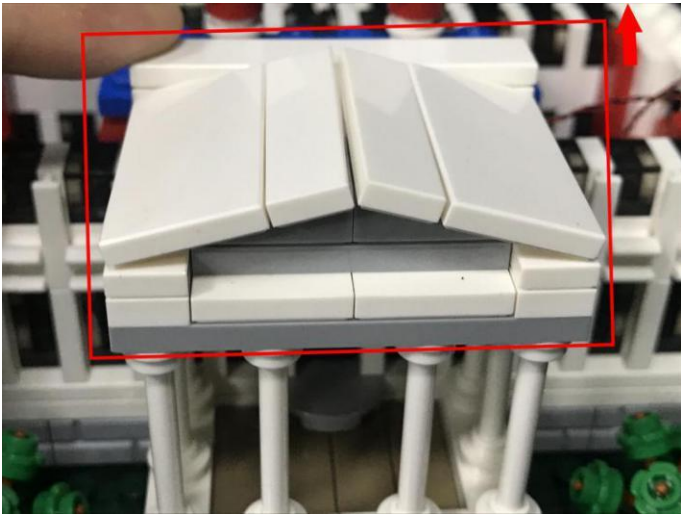


Turn to the back of the house, remove the following trees.

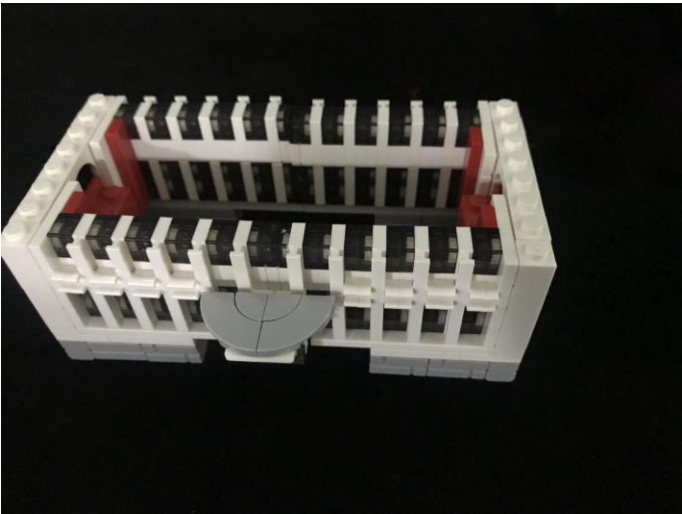
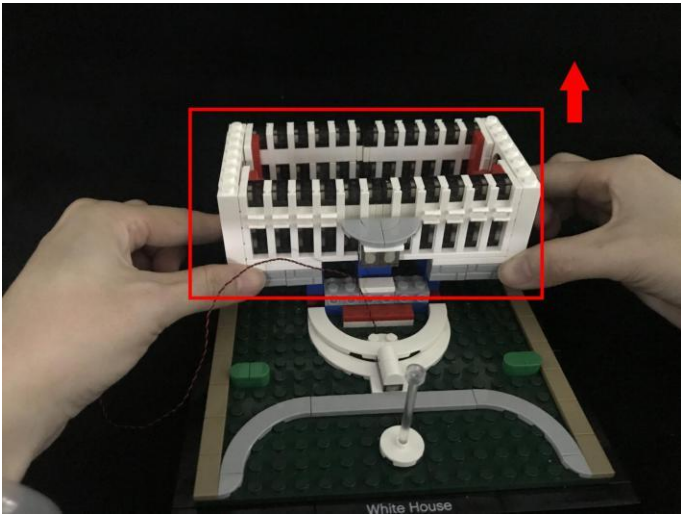


Remove the white roof piece.

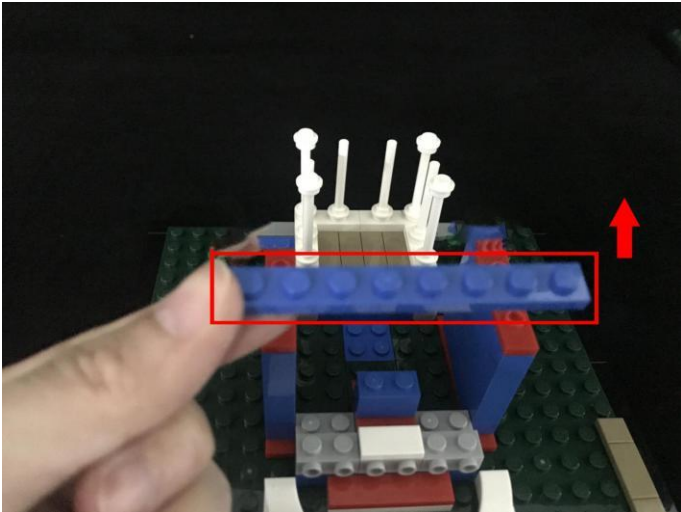




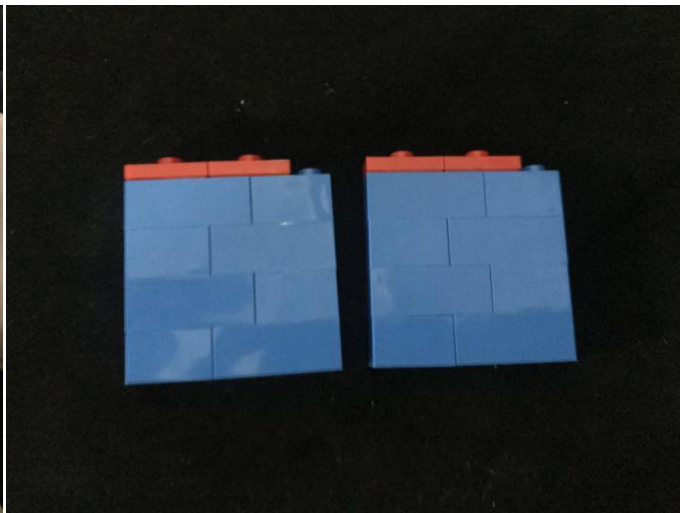
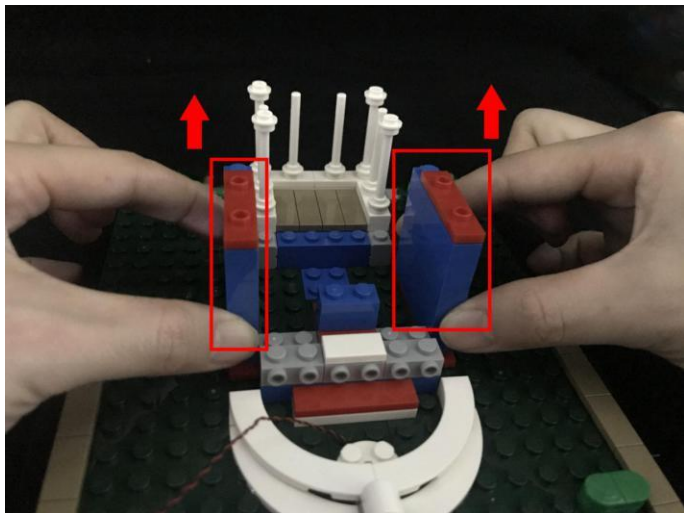
Remove the following part.



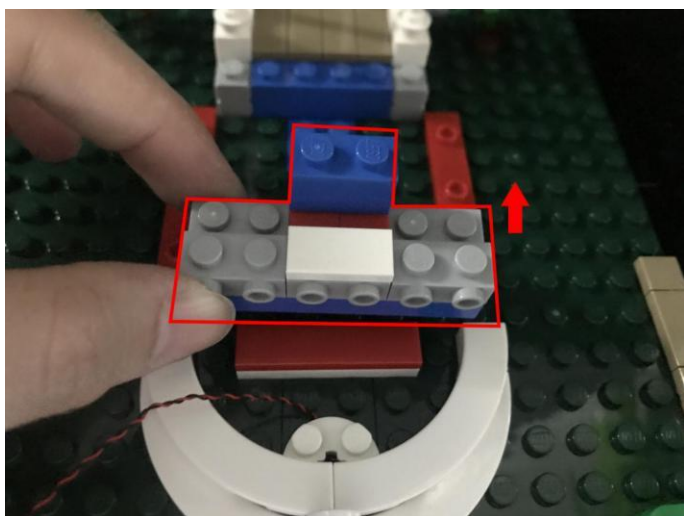
Disconnect the 1x8 blue piece.



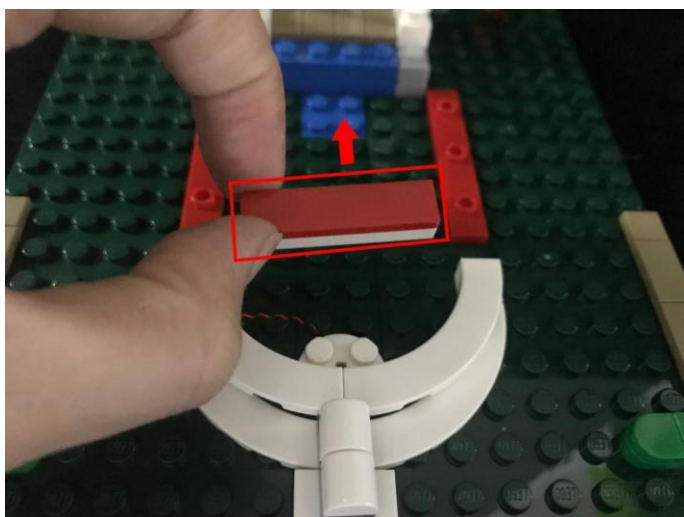
Continue to disconnect the following blue wall pieces.



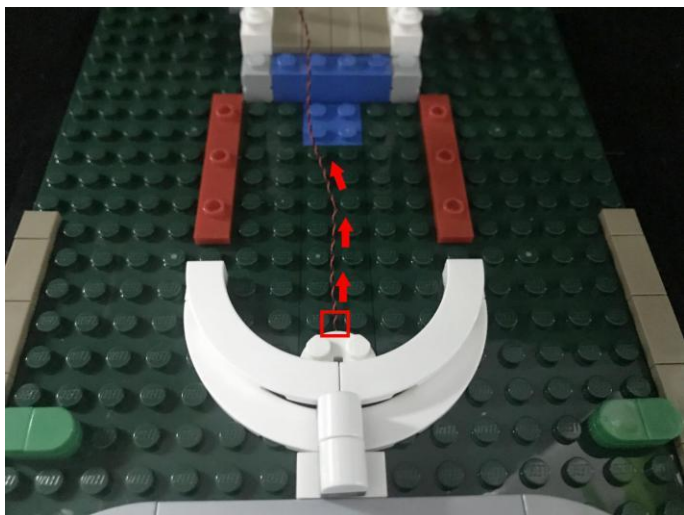
Disconnect the blue and gray piece marked in red as per below.



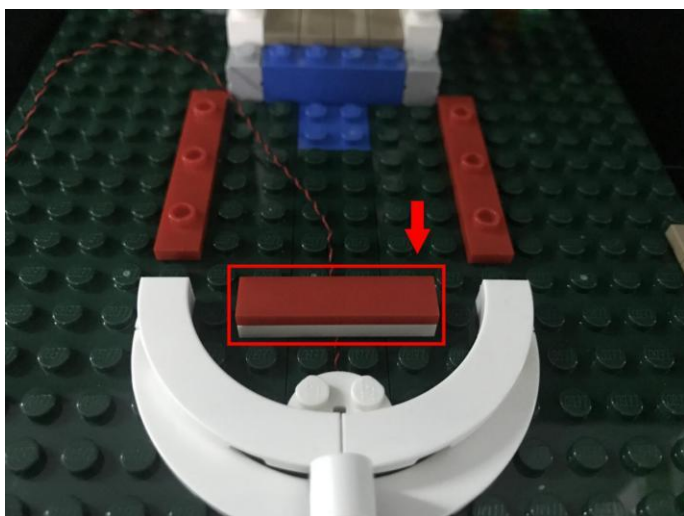
Disconnect the following 1x4 red and white piece.



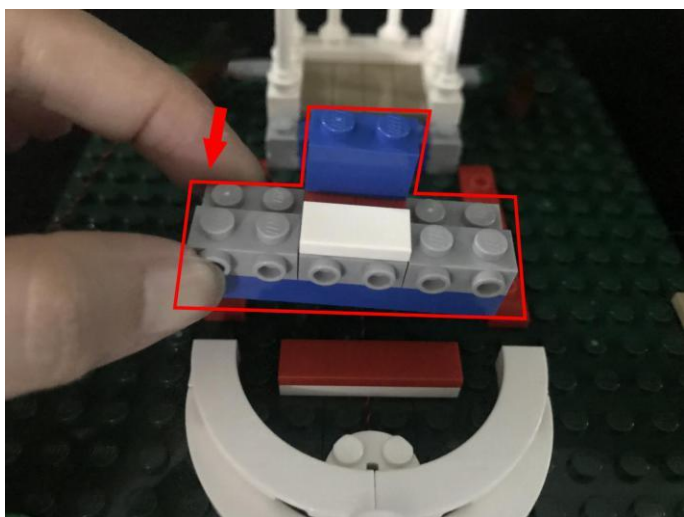
Follow the red arrows, pull the cable as per below.



Reconnect the red and white 1x4 piece.

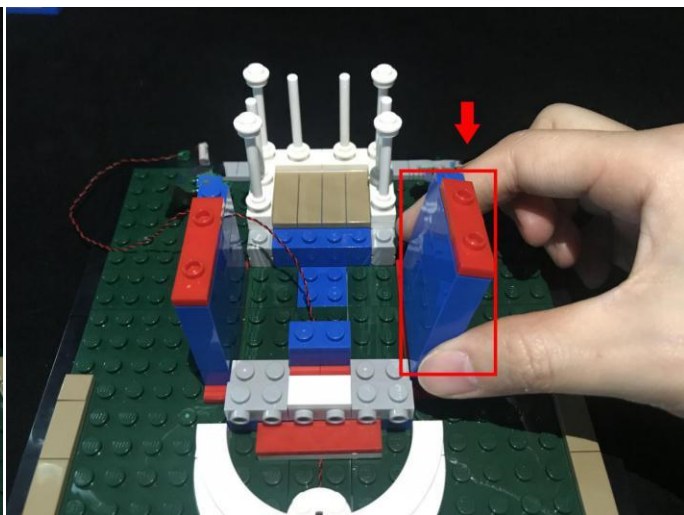
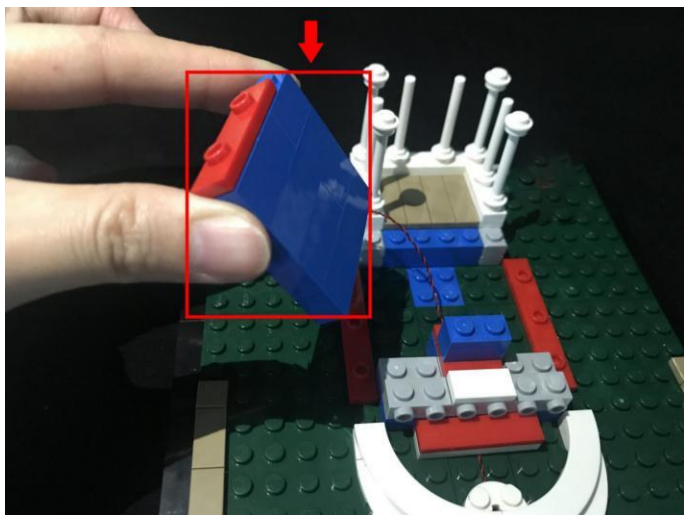


Reconnect the blue gray and red piece.

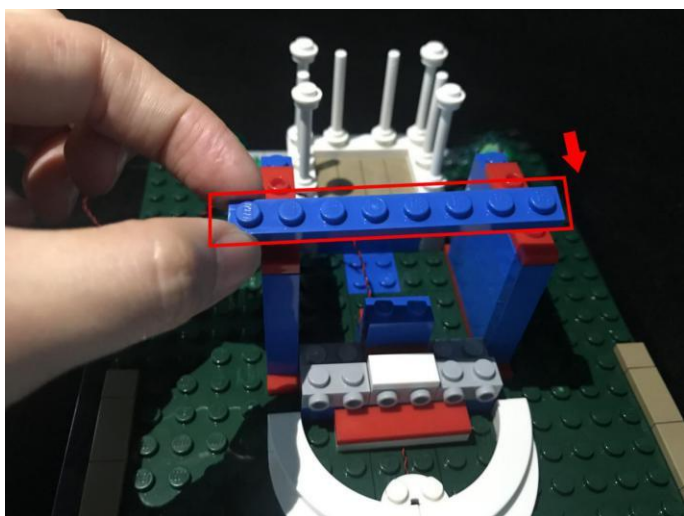


Reconnect the following 2 blue pieces.

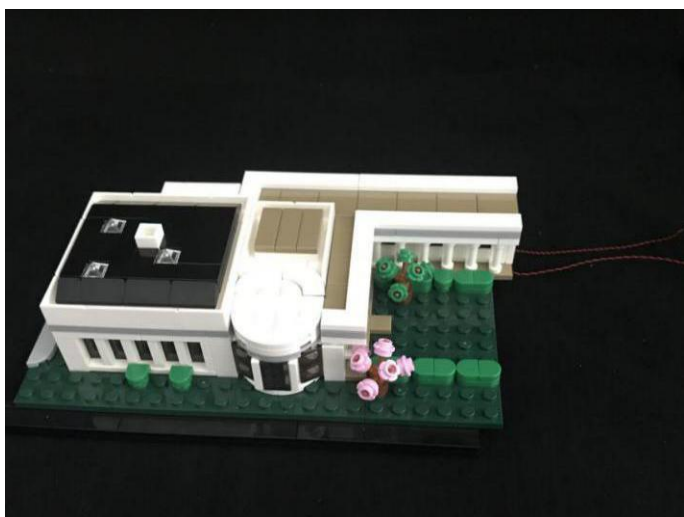




Reconnect the blue 1x8 piece.

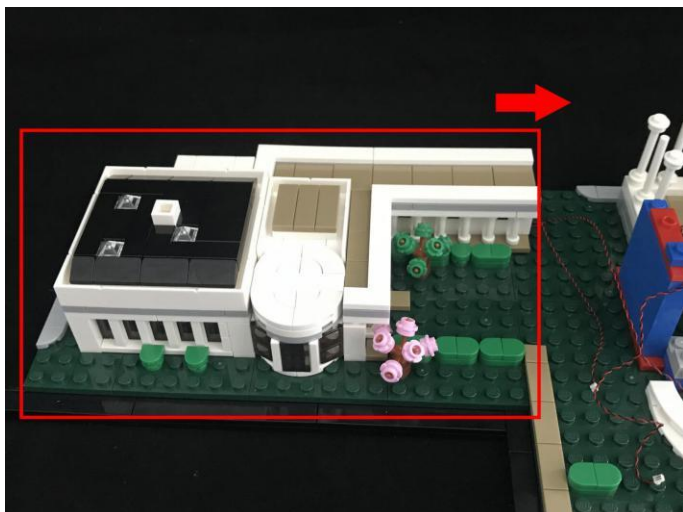


Take the number ① and number ③ parts.

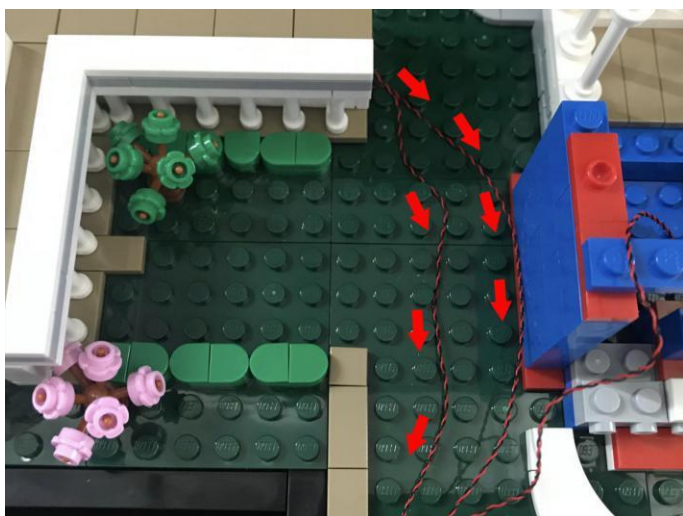


Reconnect the number ① part.

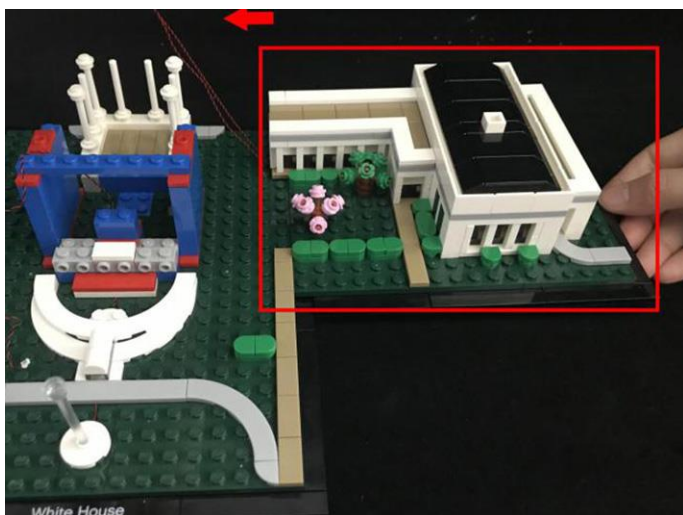




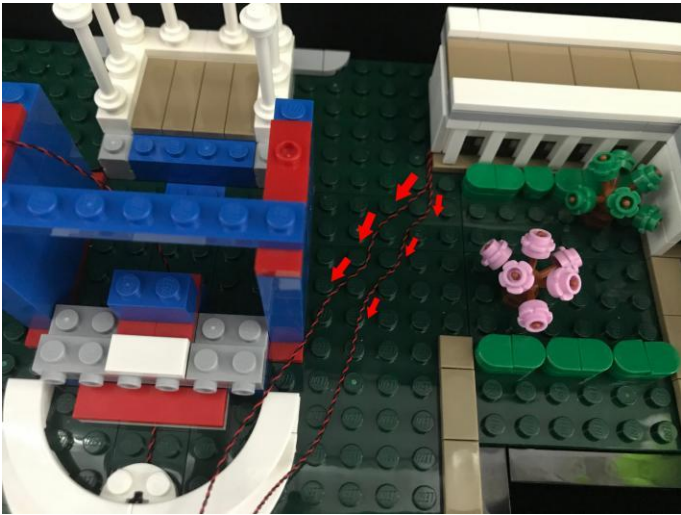
Follow the red arrows to place the cables from the number ① part.



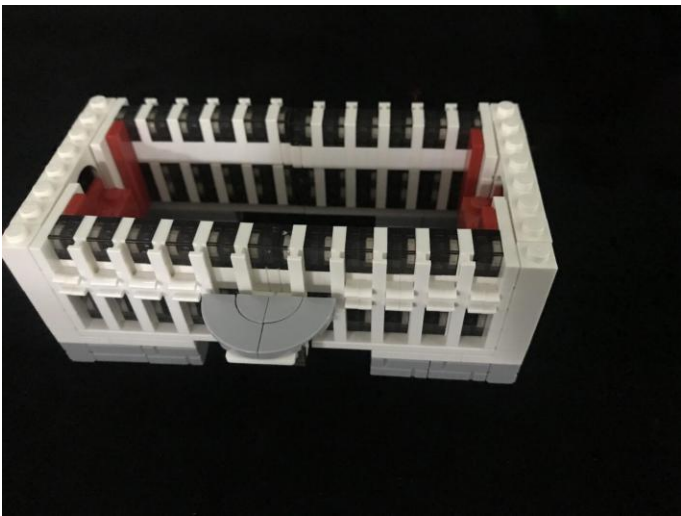
Reconnect the number ③ part.



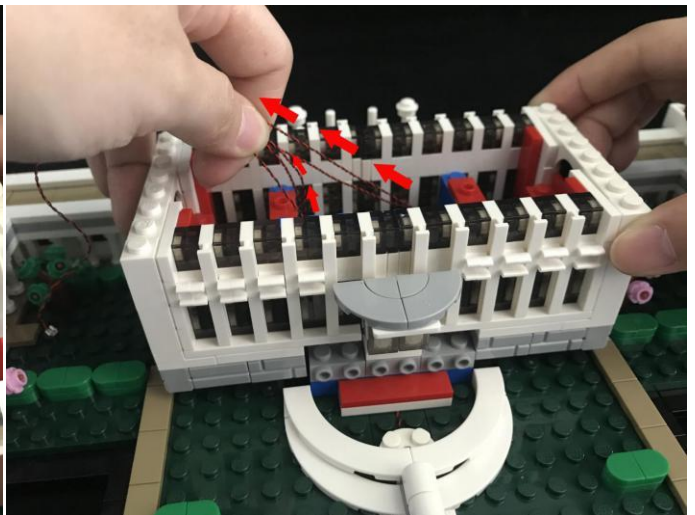
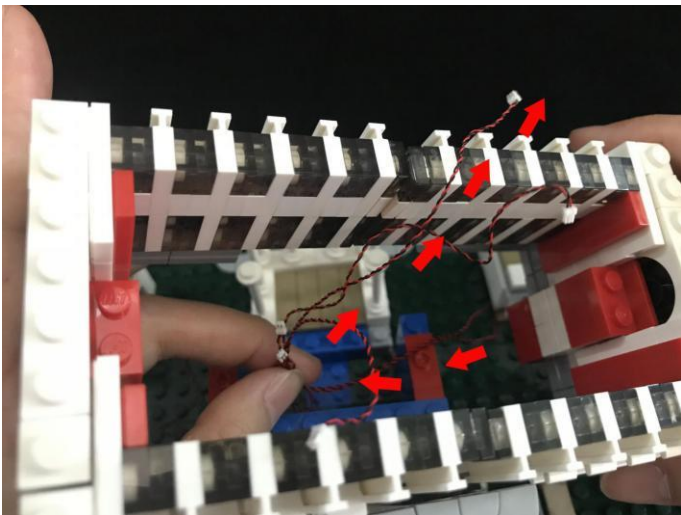
Follow the red arrows to place cables from number ③ part.



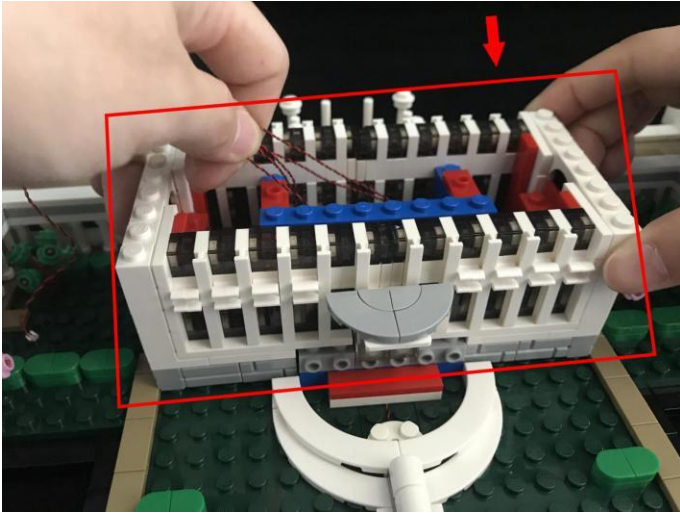
Take the following piece.



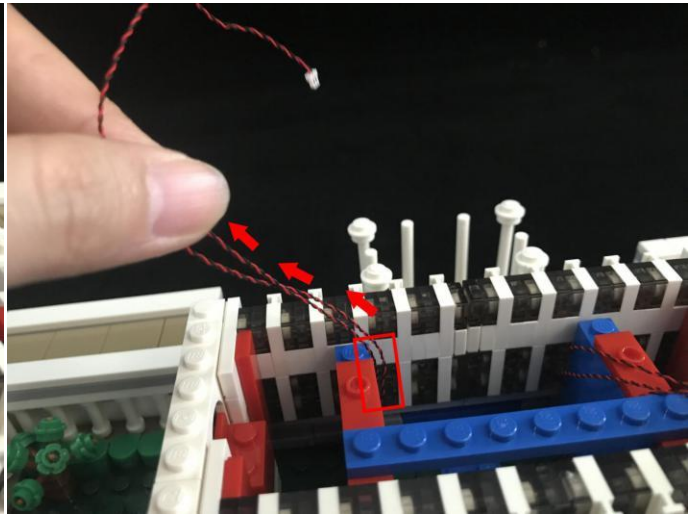
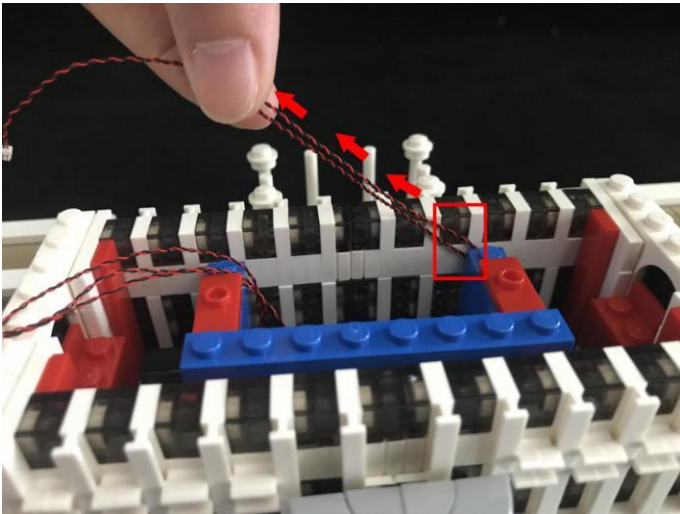
Follow the arrows to thread the cables as per below.



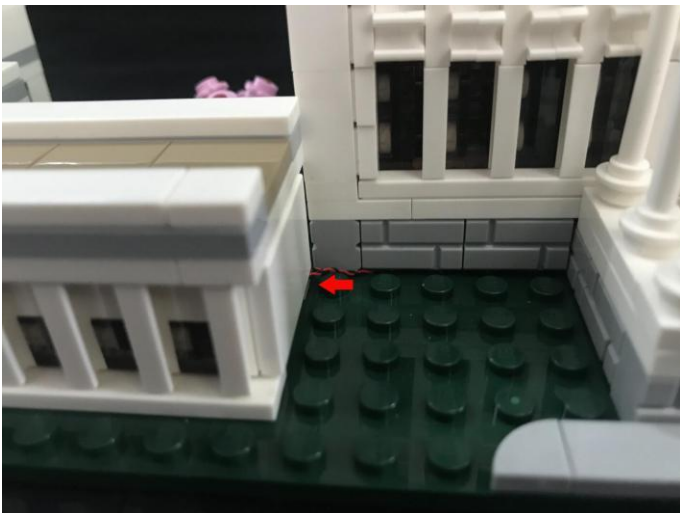
Reconnect the main house as per below.



Follow the arrows to thread the cables through the blue pieces as per below.

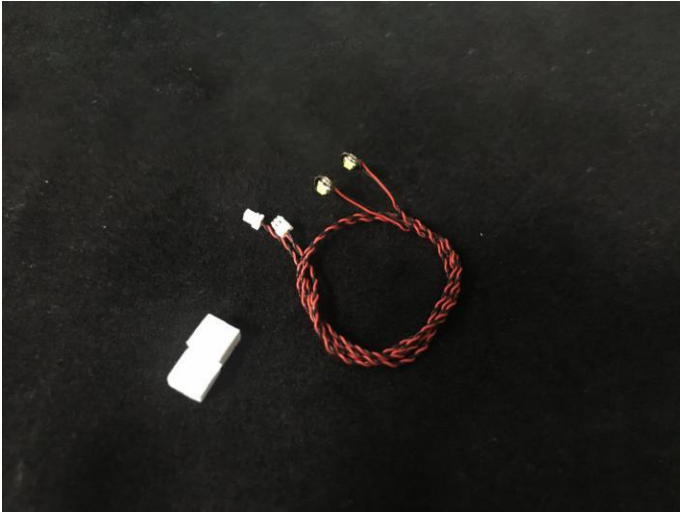


Follow the arrows to place the cables as per below.

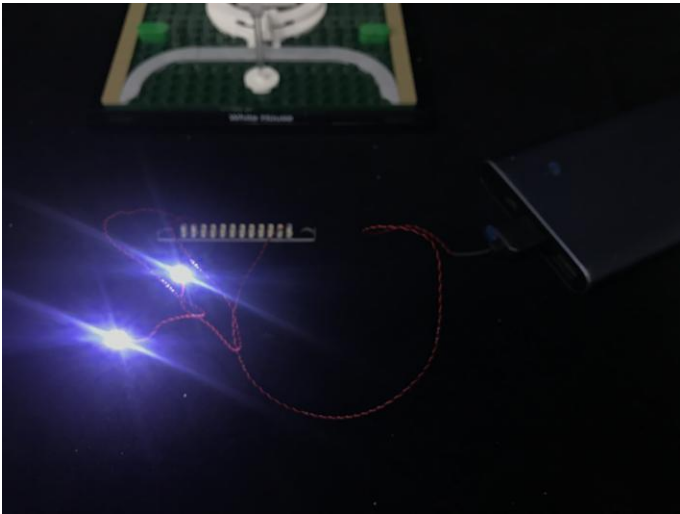


(Please place the cables in between studs, and do not break them) .  
Turn to the front of the white house, take 2 white 15cm dot lights, and 2 adhesive squares.





Connect the cables to the expansion board and turn the power on to test the lights.



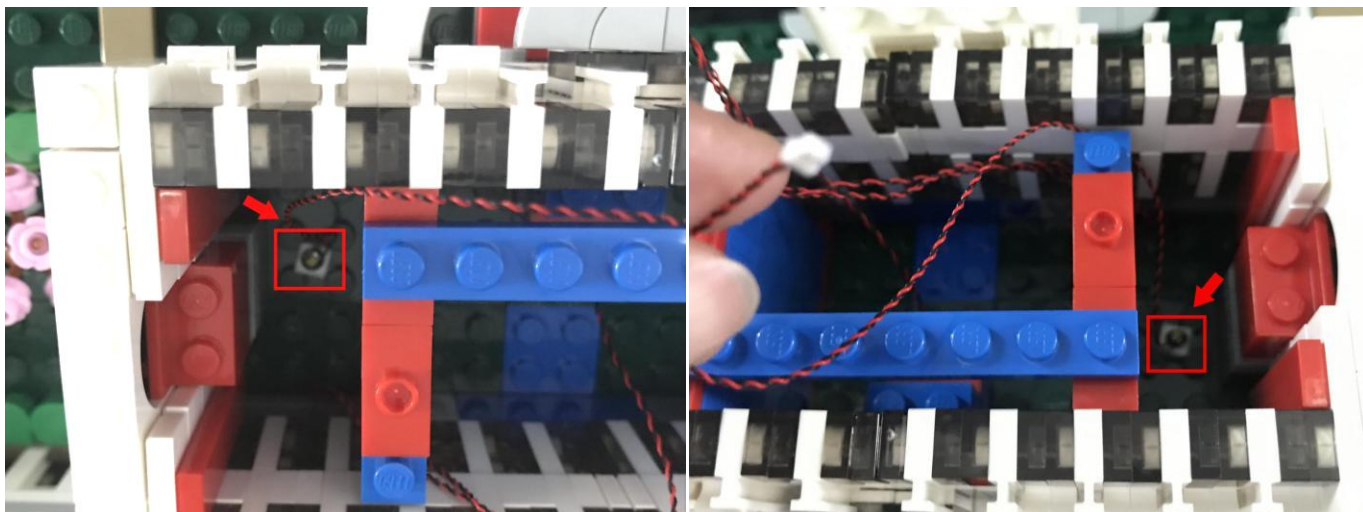
(After the test, disconnect the cables, keep the USB cable and the cable of the expansion board connected to the power bank as per below) .

With lighting part facing up, stick them to the adhesive squares.

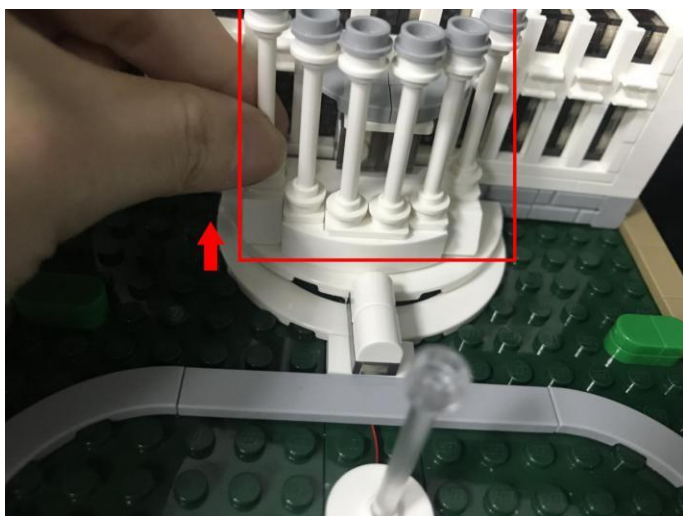


Stick the adhesive squares to the following places underneath the house (you can use the tweezer to help).

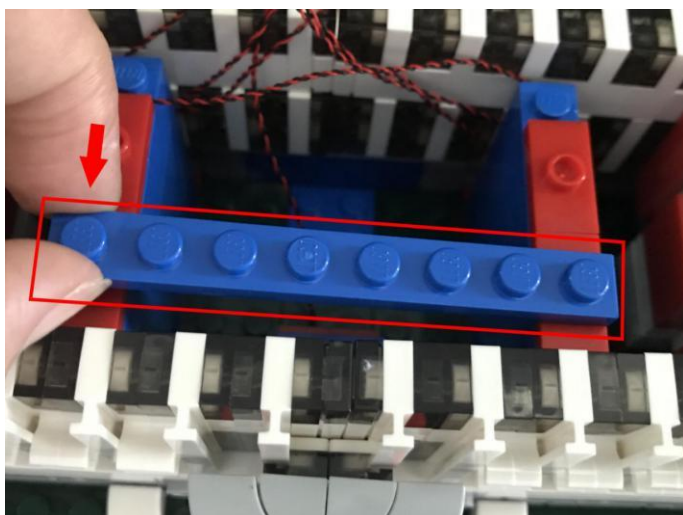




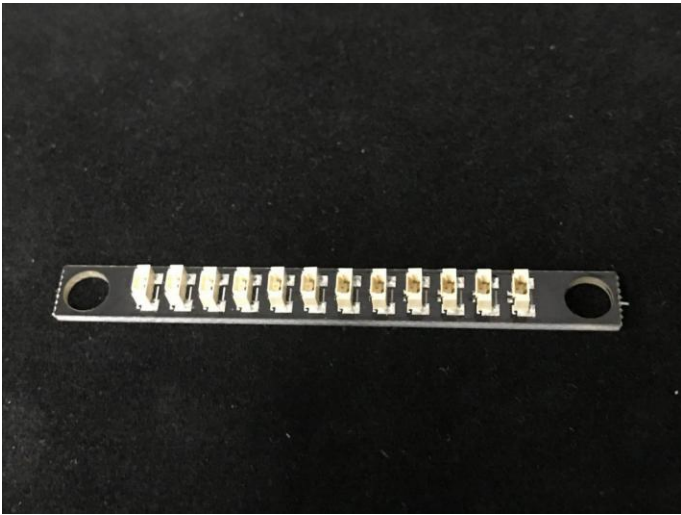
Reconnect the following piece on the step.



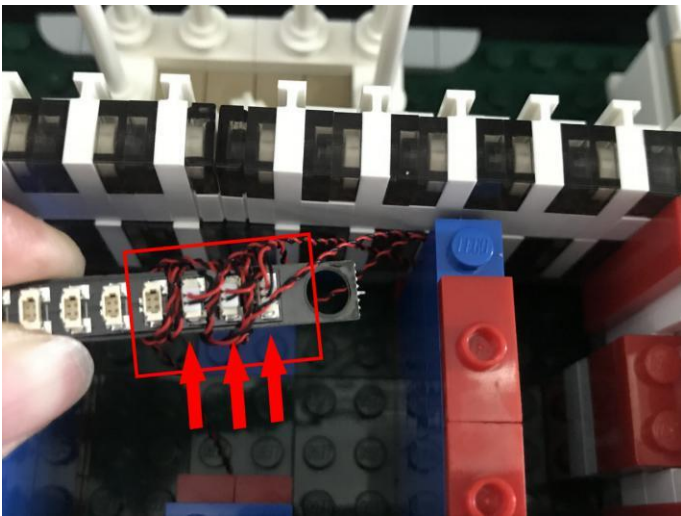
Remove the following blue 1x8 piece.



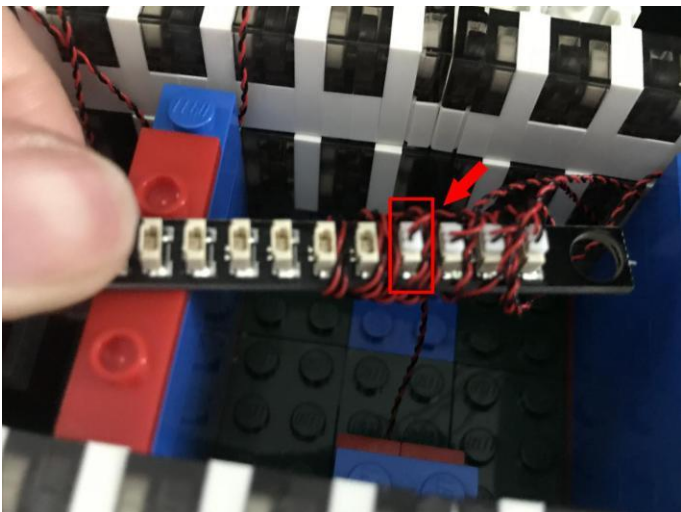
Take a 12-port expansion board.



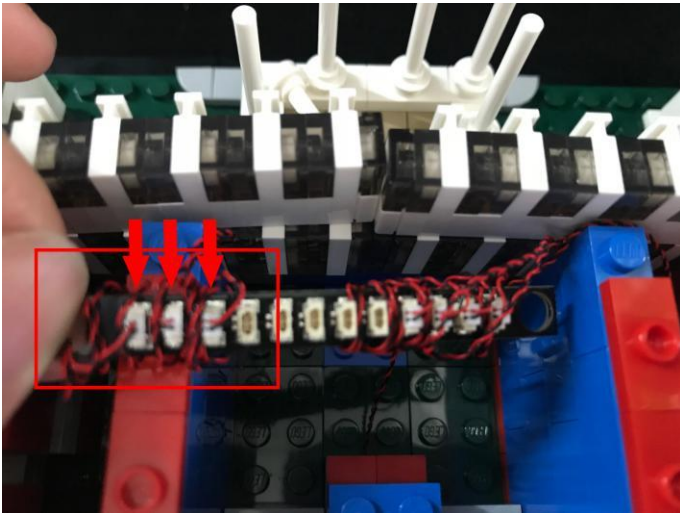
Connect the following cables to it (you can tuck excess cables around the expansion board).



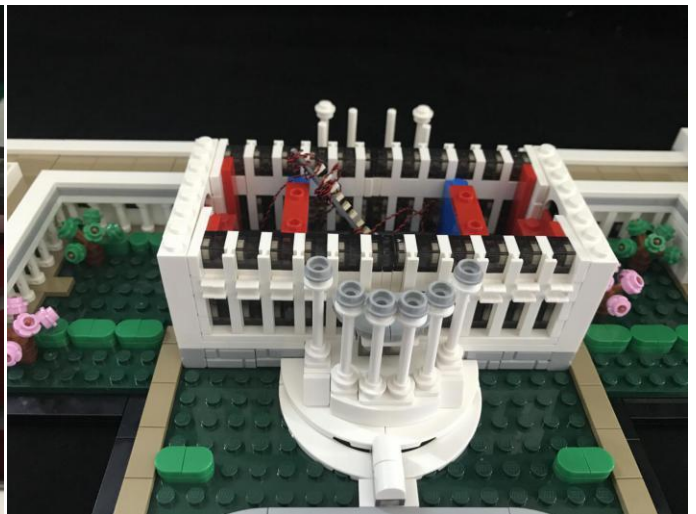
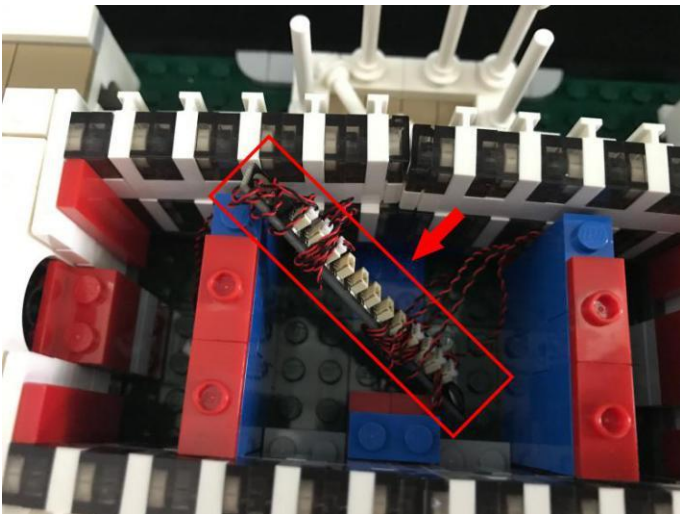
Connect the cable of the light from the fountain to the expansion board (you can tuck excess cables around the expansion board).



Connect the cables of the lights from the other side to the expansion board (you can tuck excess cables around the expansion board).



Place the expansion board inside as per below.

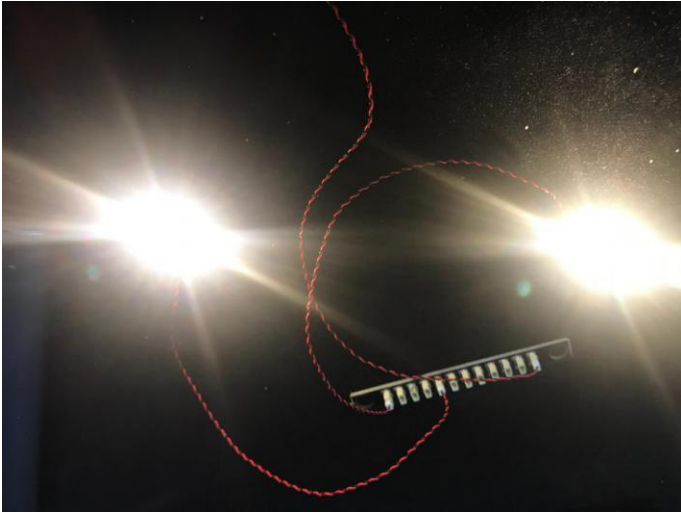


Take 2 warm white 15cm head lights, 2 adhesive squares.

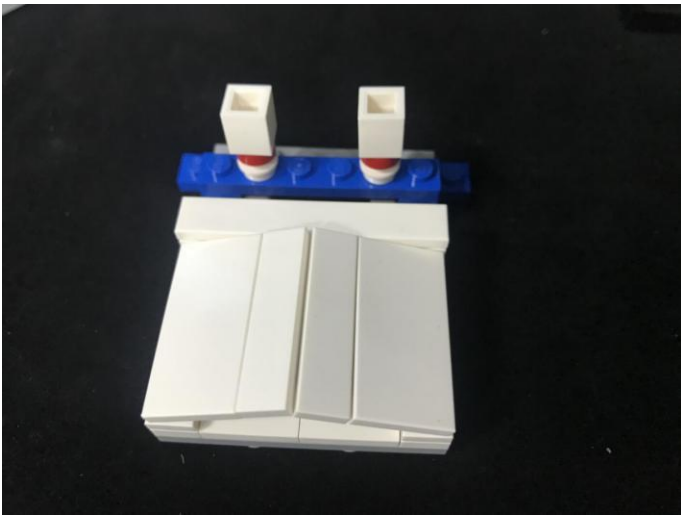


Connect the cables to the following expansion board (which is connected to the power bank), turn the power on to test the lights.

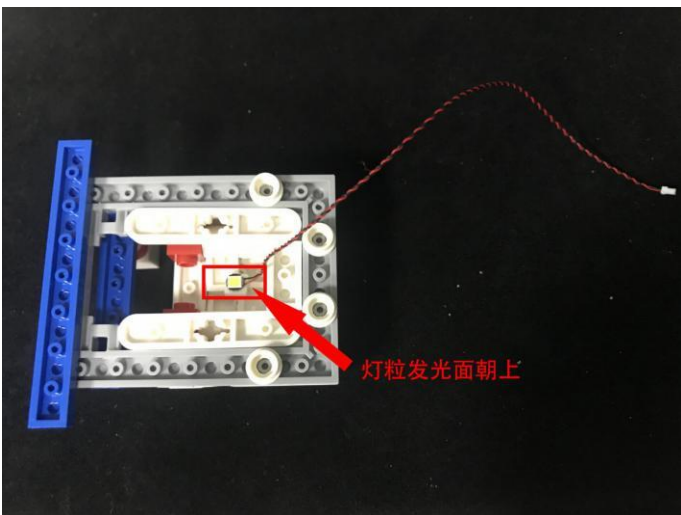




(After the test, disconnect the cable, keep the USB cable and the cable of the expansion board connected to the power bank as per below) .  
Take the following white roof piece.

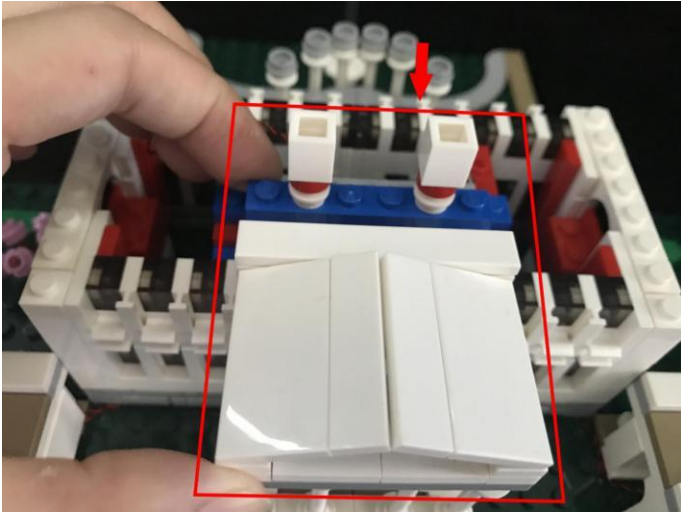


Stick the light to the center of the roof as per below.

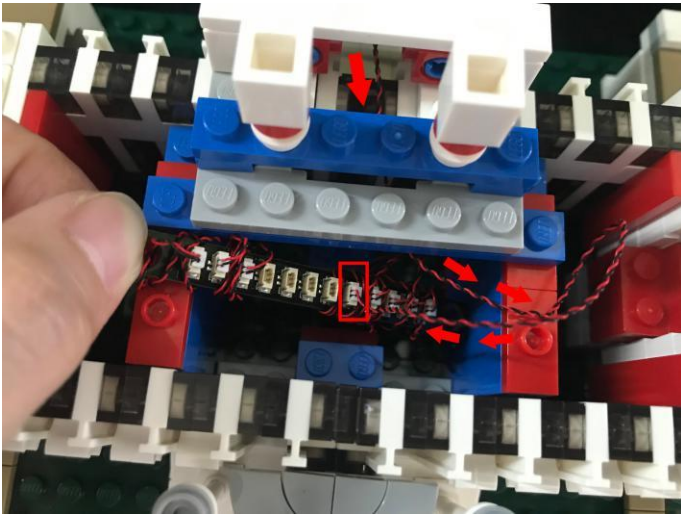


Turn to the back of the white house, remove the white roof piece as per below.

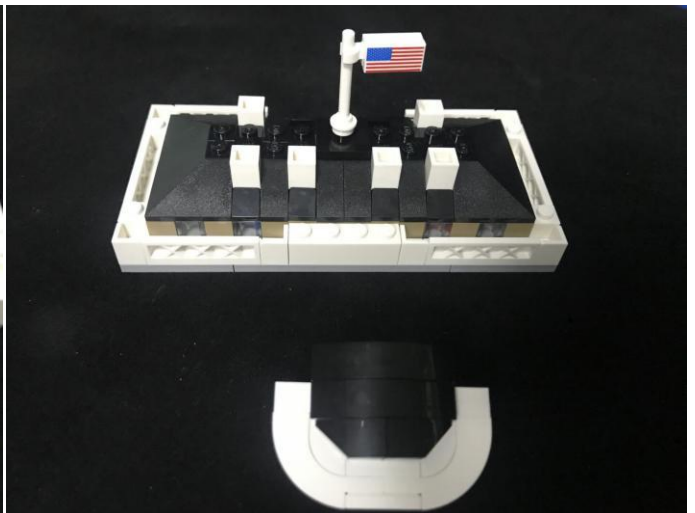
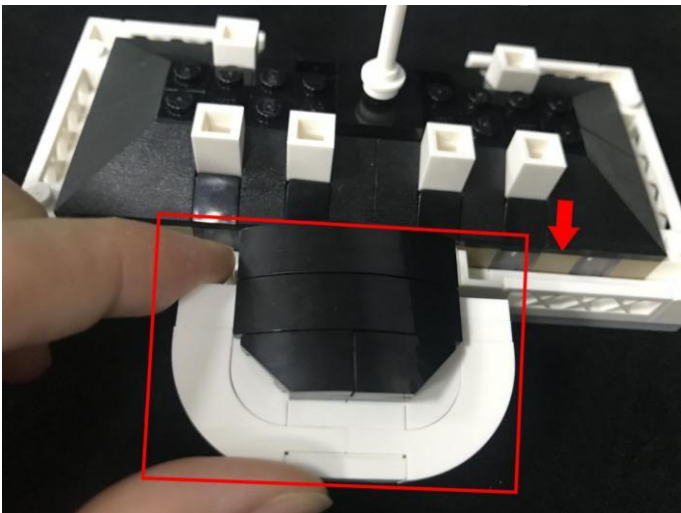




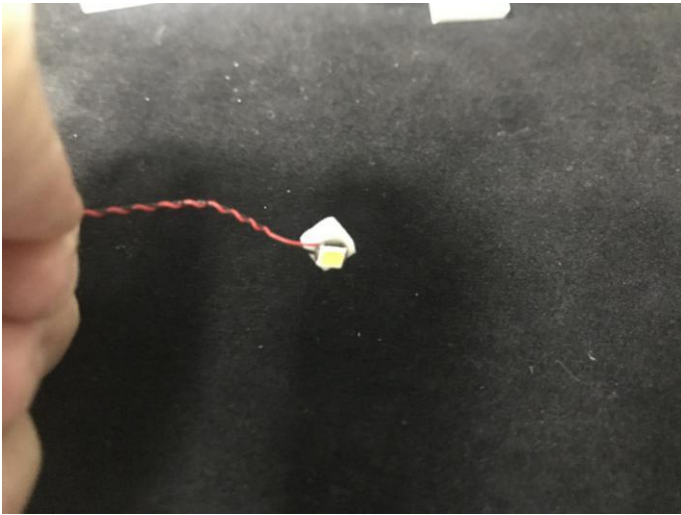
Thread the cable through the following space and connect it to the expansion board.



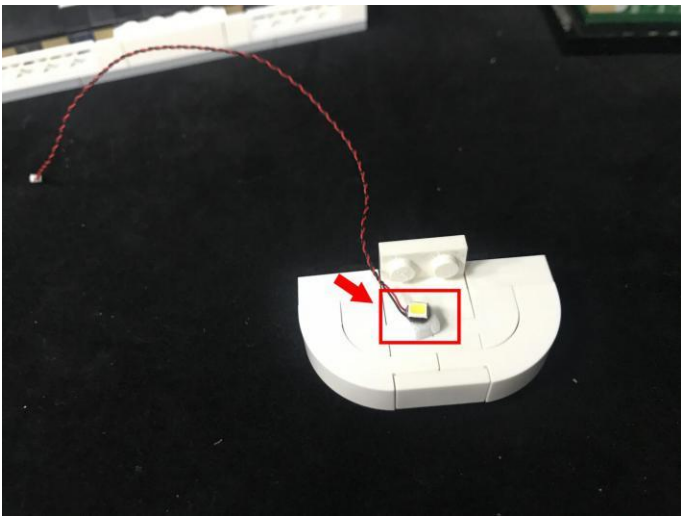
Disconnect the half circle black piece from the number ② part.



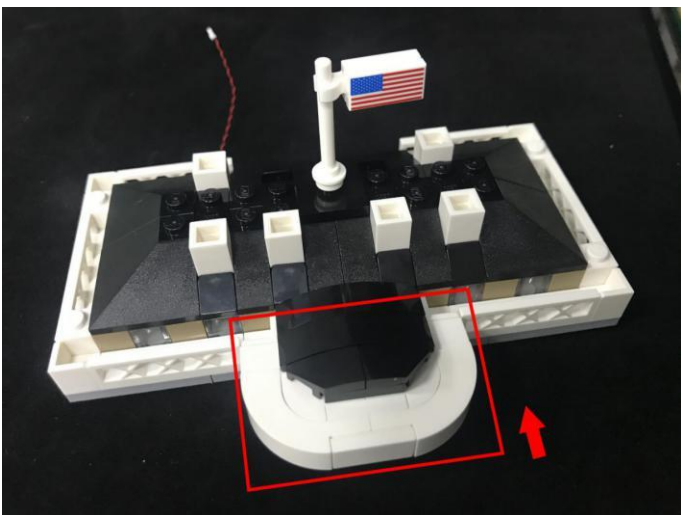
With lighting part facing up, connect a light to an adhesive square.



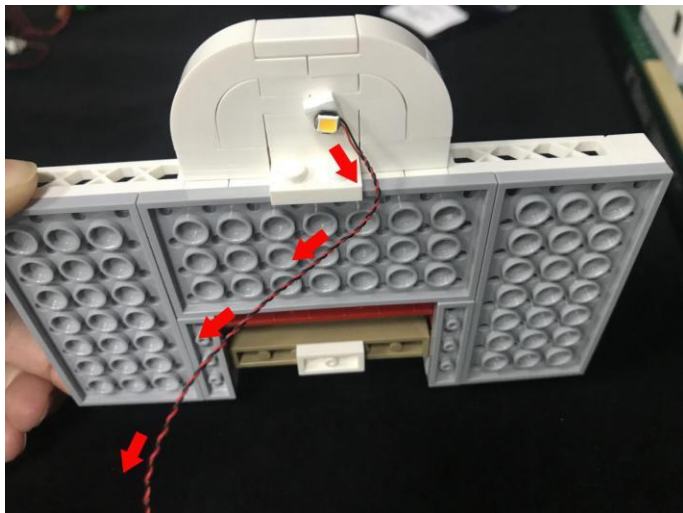
And stick the light to the half circle piece as per below.



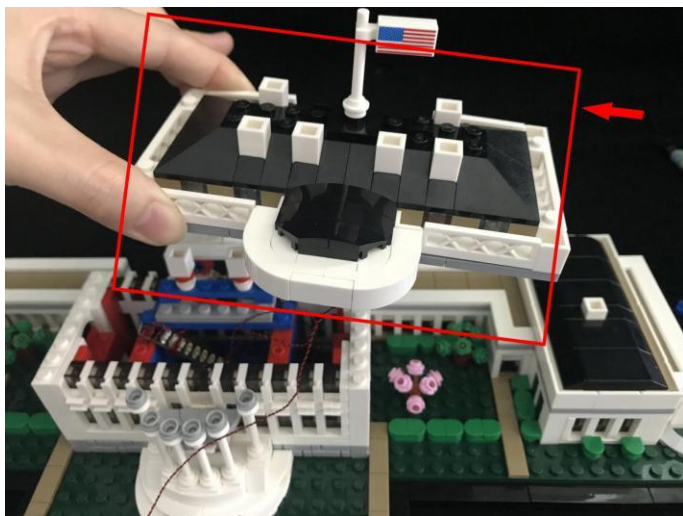
Reconnect the half circle piece.



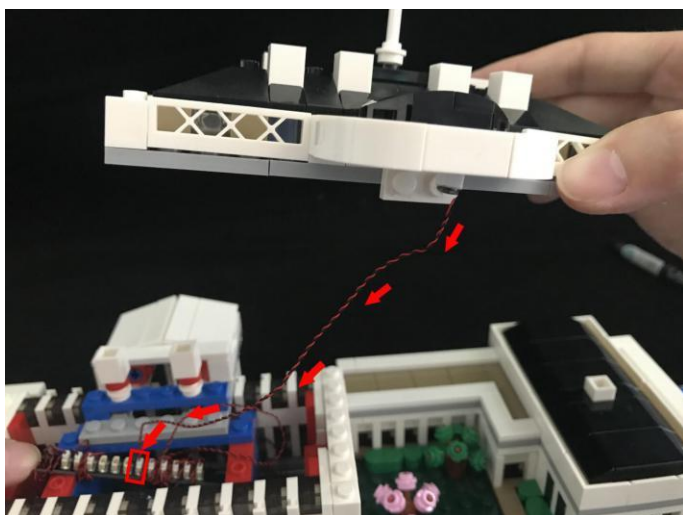
Follow the arrows to place the cable as per below.



Lift the following black piece.

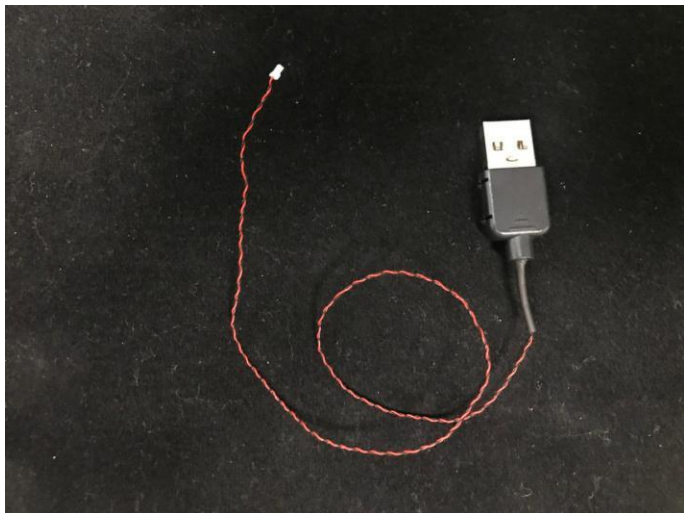


Connect the following cable to the expansion board, (you can tuck excess cables around the expansion board).

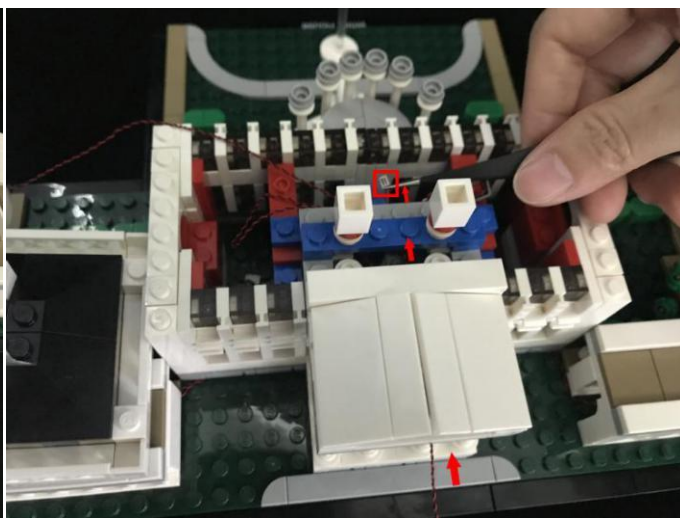
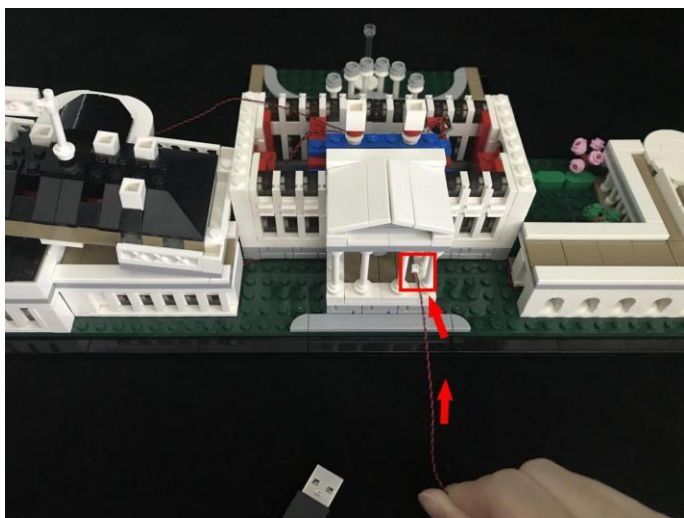


Take the USB cable.

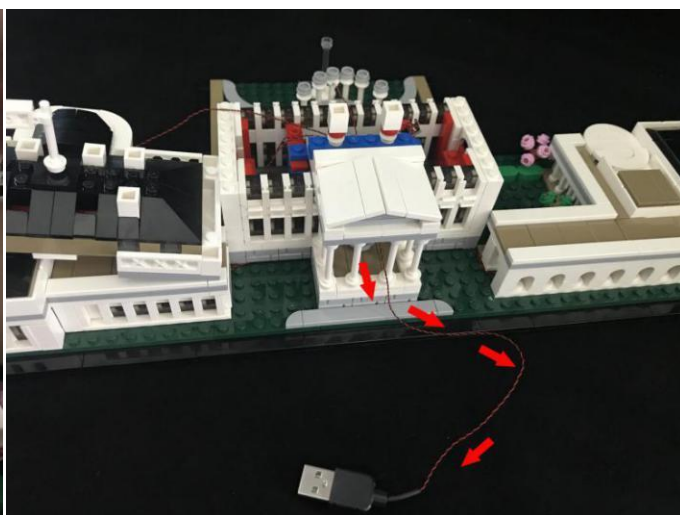
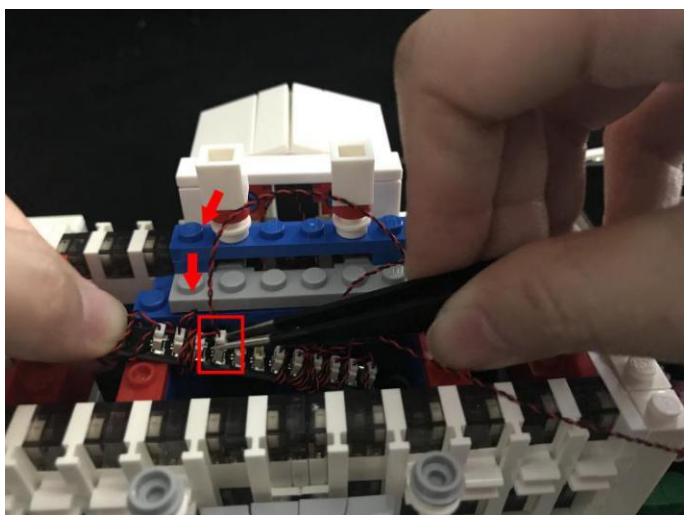




Turn to the back of the white house, thread the USB cable through the following space (you can use the tweezers to help).

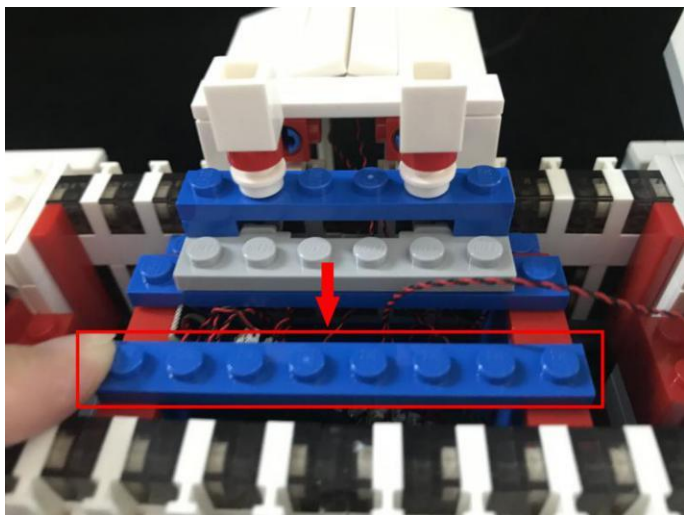


Connect the USB cable to the expansion board as per below.

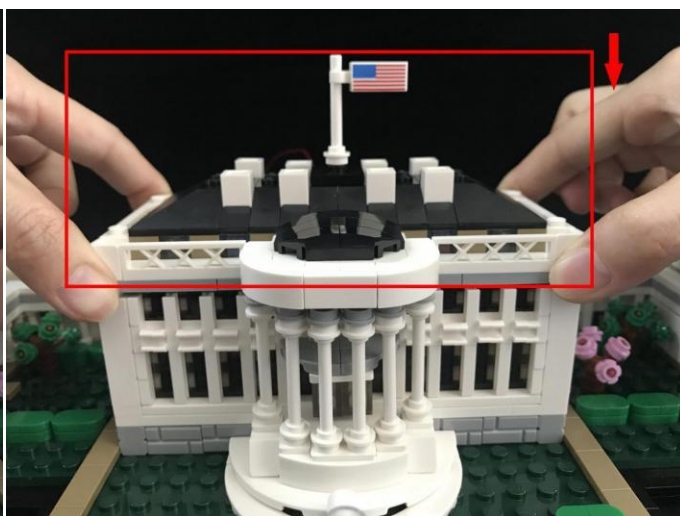
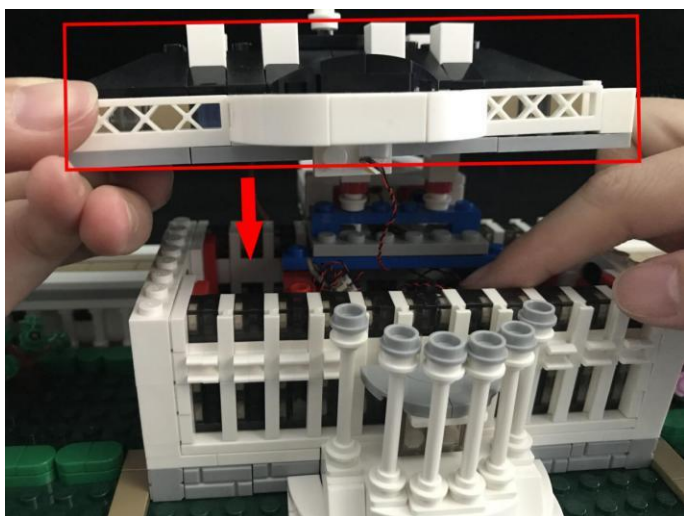


Reconnect the 1x8 blue piece.

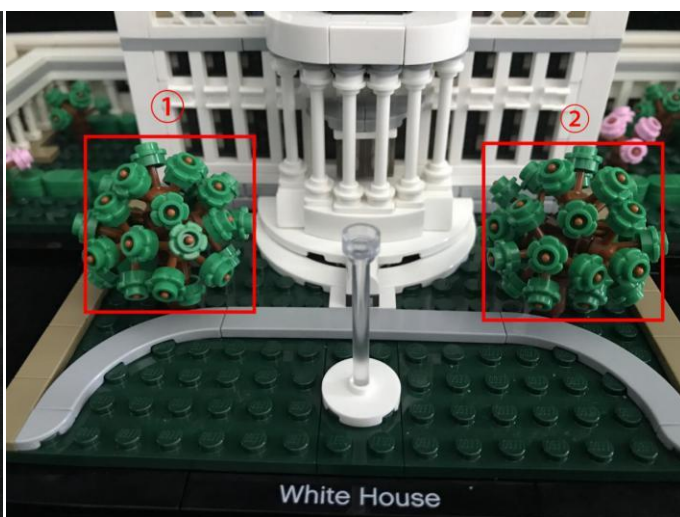
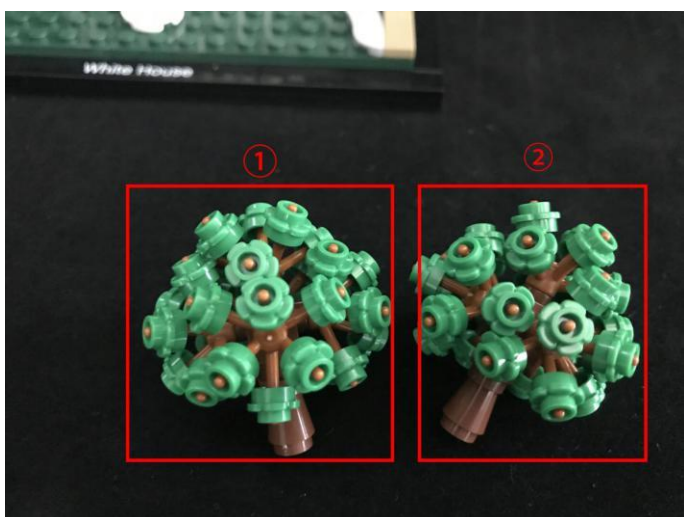




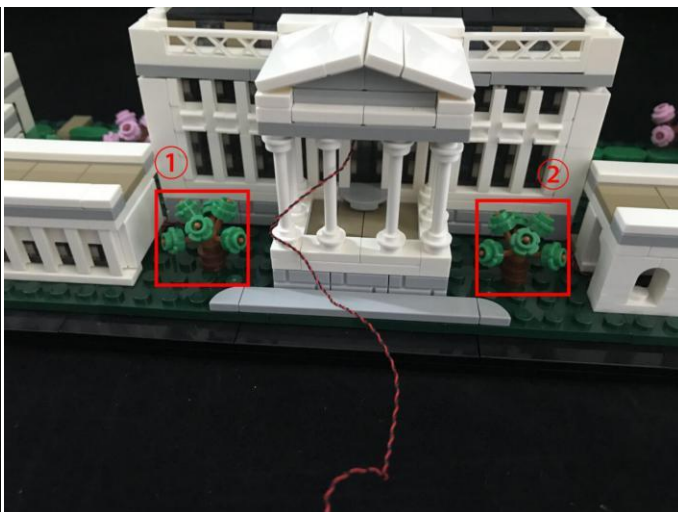
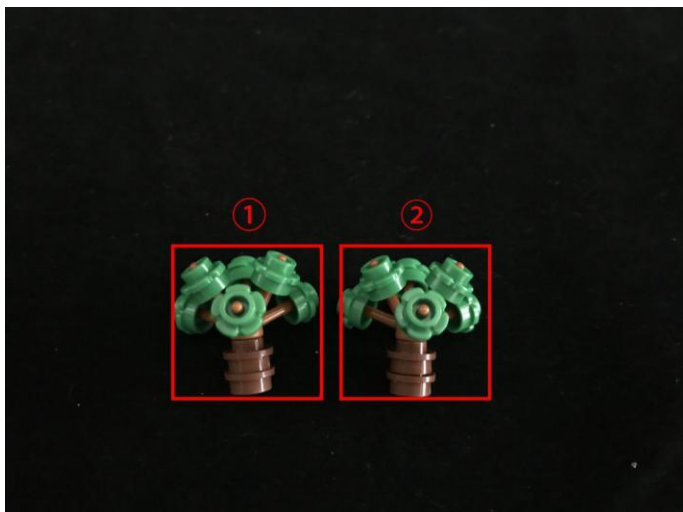
Tuck excess cable before reconnecting the black roof piece as per below.



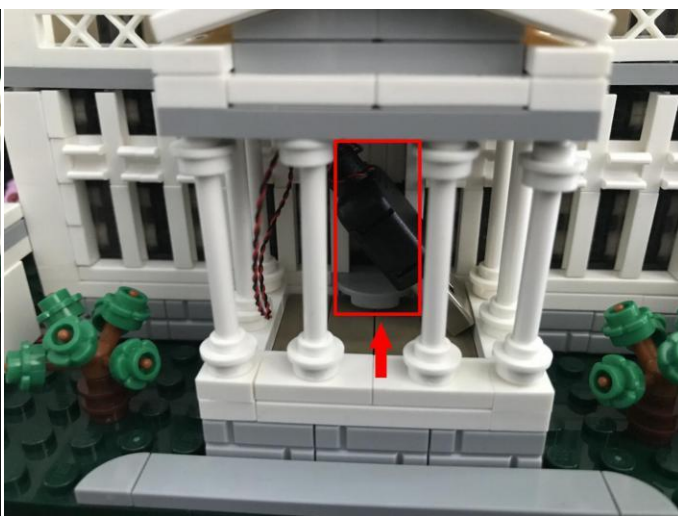
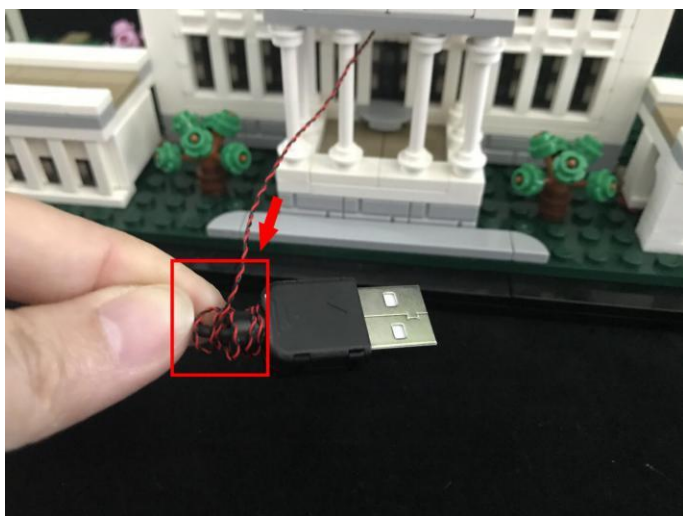
Reconnect the trees as per below.



Continue to reconnect the following trees.



Tuck excess cable before placing the USB cable to the following place marked in red.



This completes installation of this LED Lighting Kit. ENJOY!



The above are ideas and instructions provided by our designers. Please move on:

- 1: Do you have any suggestions about the material and quality of our products?
- 2: Do you have any suggestions on the installation instructions and the degree of difficulty of the installation?
- 3: If you have better installation method and ideas, please contact us in time.

