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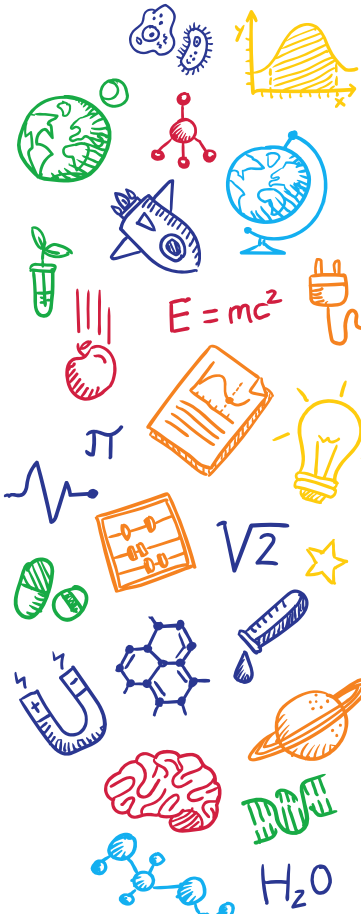
Home Automation using Voice Commands

Light control using voice commands

What will you do?

- In this activity, we are providing you a microcontroller (evive), a relay module, a built bulb circuit and a Bluetooth module.
- You have to perform the following activities
    1. Connect relay to evive.
    2. Make a code for voice command controlled lights in PictoBlox.
    3. Upload the code onto evive.
    4. Test the project and enjoy ☺



Bulb Circuit

- We will use the same assembly of the bulb and relay we have made in the Relay activity.

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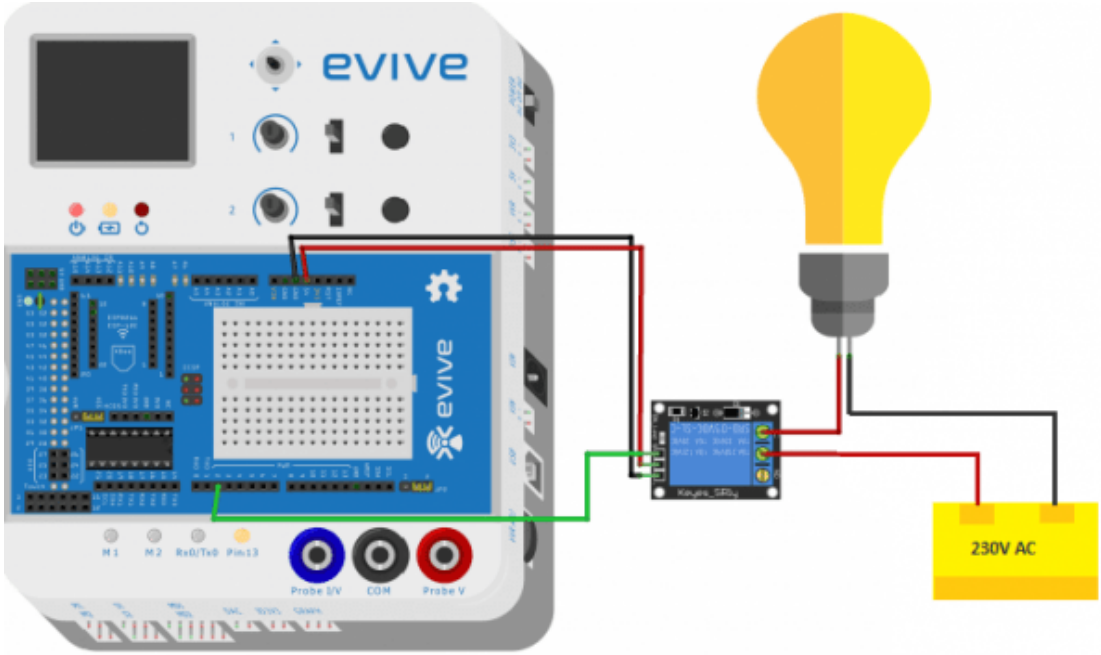
Circuitry

Circuit Diagram

- Connect the relay to evive: GND to GND, VCC to 5V and Signal pin of the relay to the digital pin 2 of evive.



Circuit Diagram

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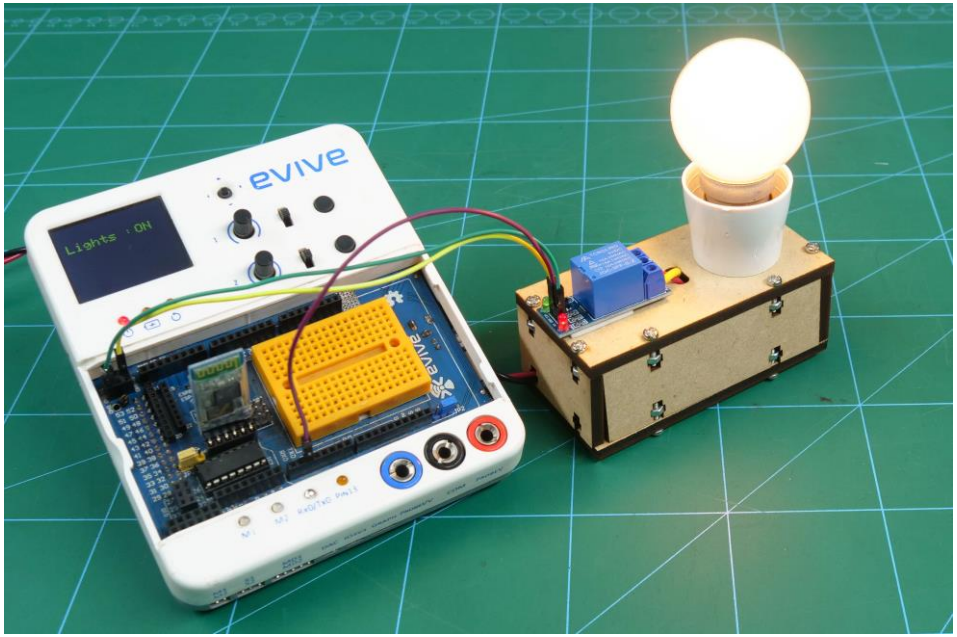
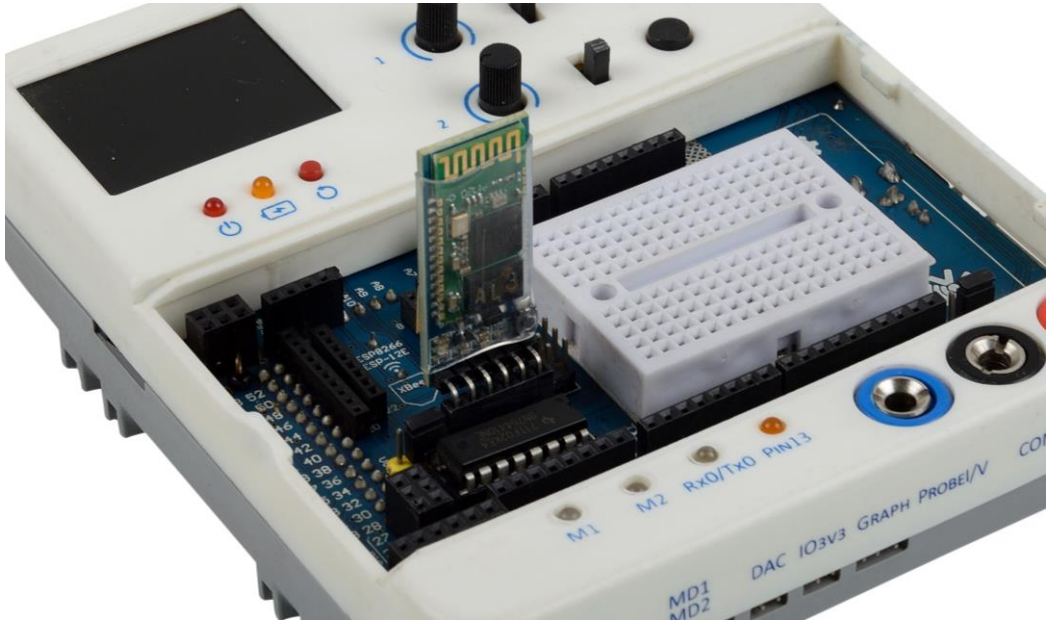
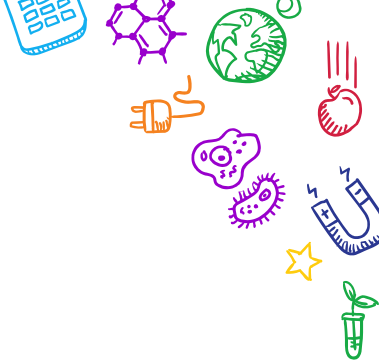


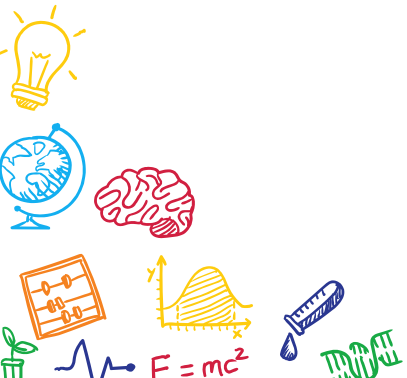
Circuit Diagram

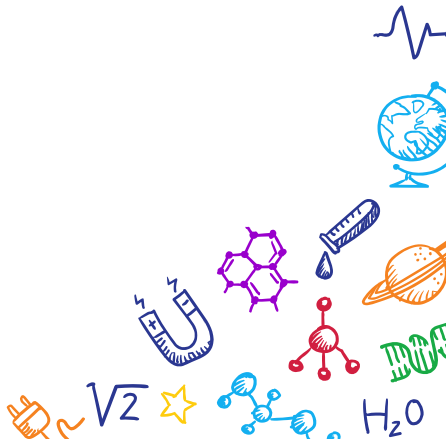
- Connect the Bluetooth Module on evive as show below:



Logic

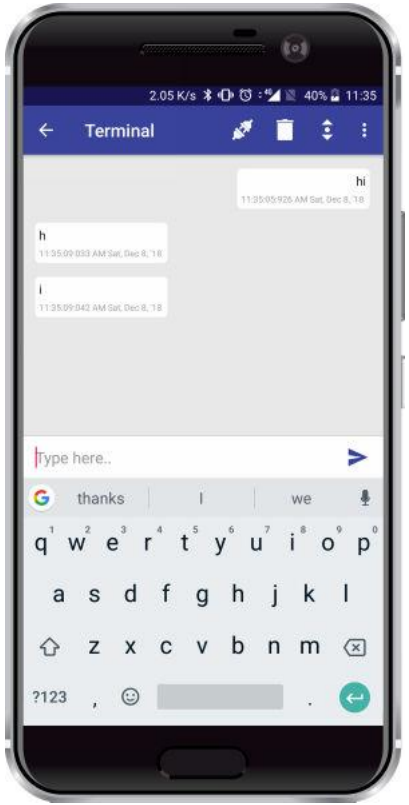






Logic

- We will use the Terminal Module of Dabble App to send commands to evive.
- evive will then check the commands coming from the Dabble app and if the command is **“lights on ”,** then we will turn on the bulb and if the command is **“lights off”,** then we will turn off the bulb.



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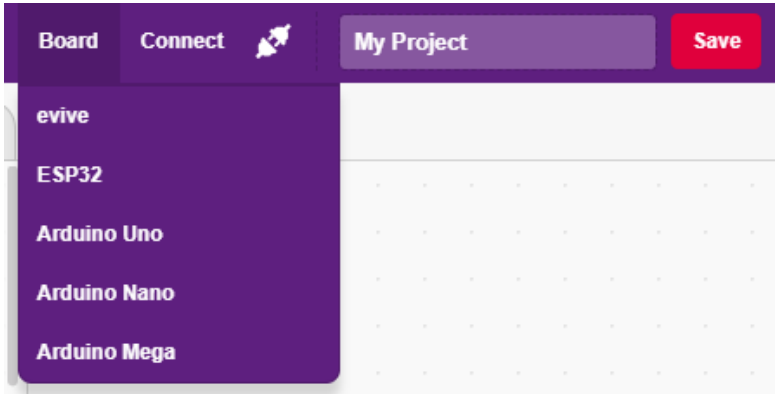
Programming the evive

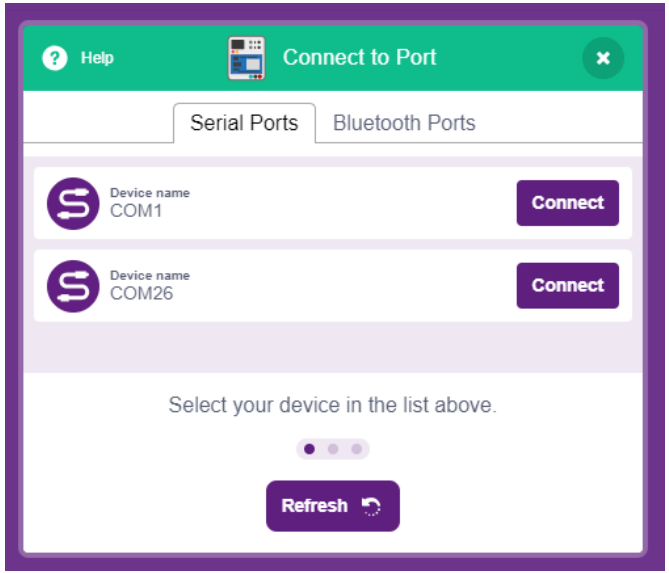
Interfacing evive with PictoBlox

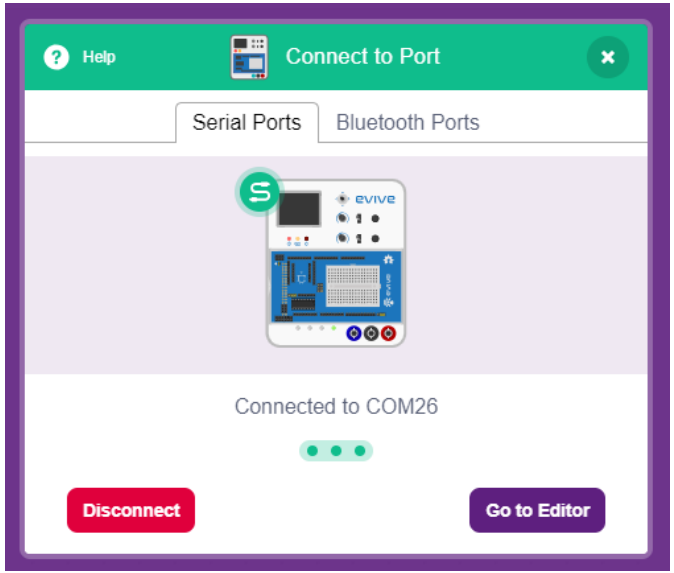
- Connect evive to your laptop/PC and open PictoBlox.
- In PictoBlox, go to the menu and click on the Boards Select the evive.



Interfacing evive with PictoBlox

- Once you've selected the board, click on the Connect tab and connect the board.



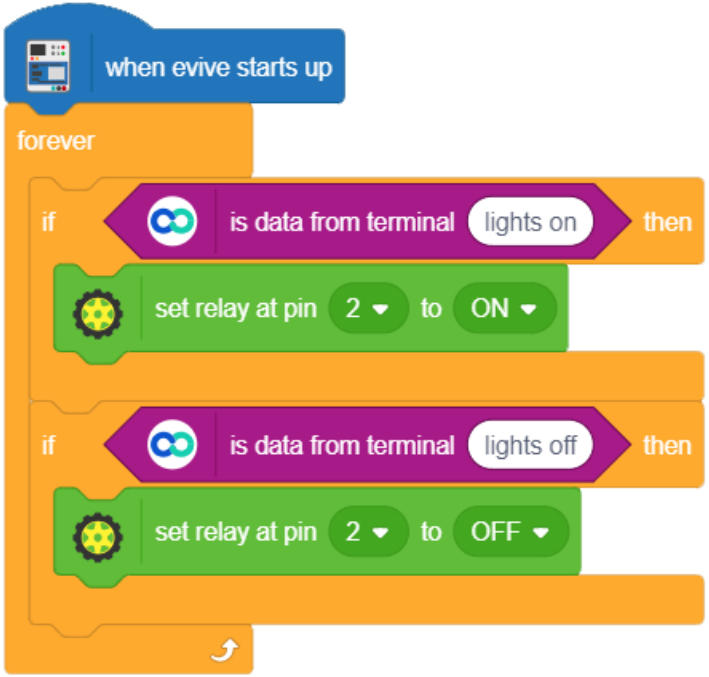


PictoBlox Program

- Go to **evive** palette. Drag and drop **when evive starts up** block into the scripting area.
- Go to **control** palette. Drag & drop the **if-then** block inside **forever** block.

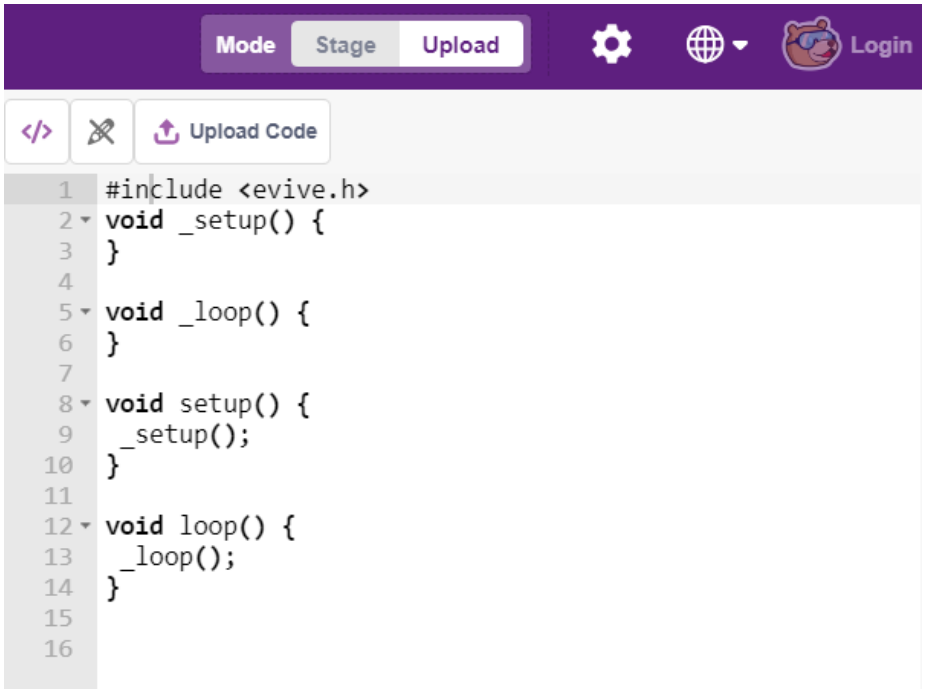
PictoBlox Program

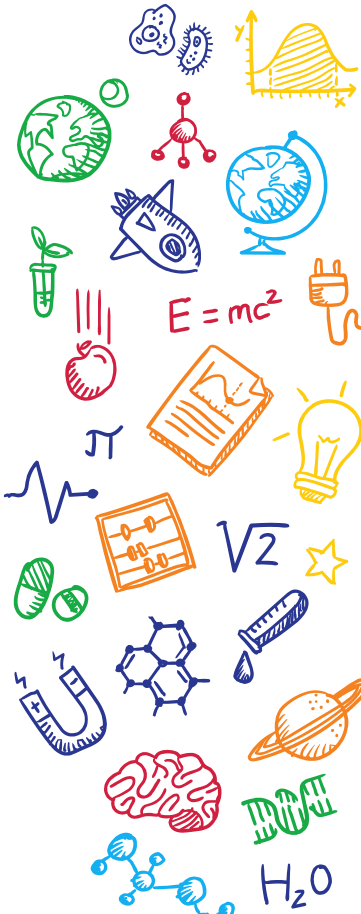
- Go to **Dabble** palette. Drag & drop the **is data from terminal ()** block inside **if then** condition. Write '**lights on**'.
- Repeat the process for lights off.



PictoBlox Script

- Upload the code onto evive by clicking on the Upload Code Button:



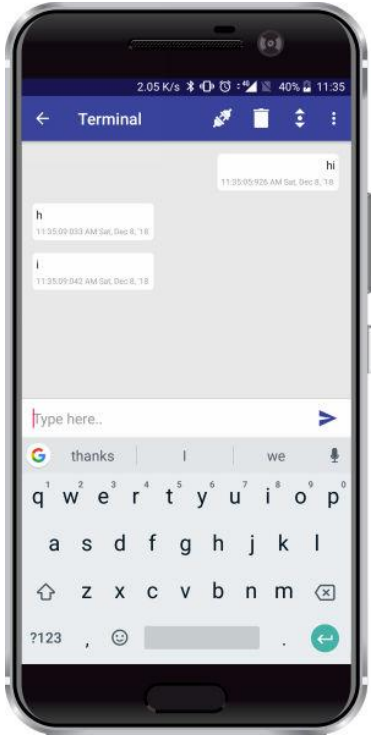


Connecting Bluetooth to Dabble

- Turn ON evive and connect the Bluetooth to Dabble App.

Control the lights using Terminal Module

- Write the exact message you have written in the program.



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