Activity

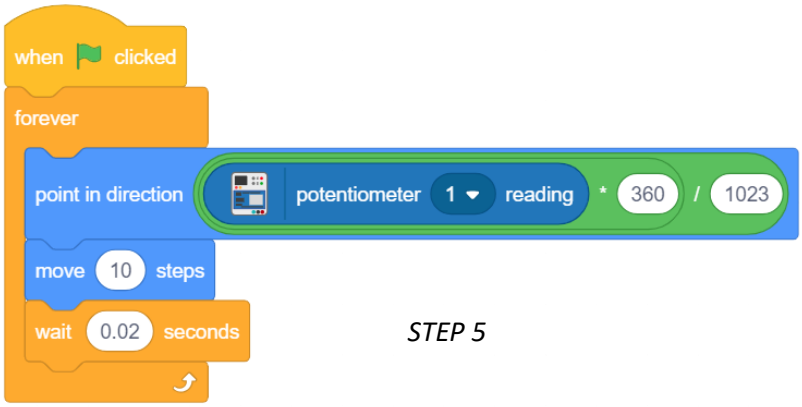
Analog Input

Reading State of Potentiometer

In this activity, you will learn how to read the state of potentiometer and using its reading to make a mouse move around in the stage. You will also make a script to control the brightness of the LED 13 using potentiometer.

STEP-BY-STEP

1. Open PictoBlox, connect evive to your computer, and select the Board as evive.
2. Once you've selected the board, click on the Connect tab and connect the board. Click on **Upload Firmware** button.

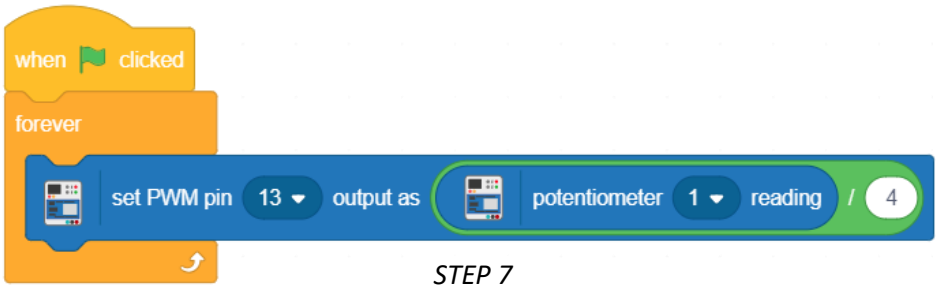


STEP 5

CONTROLLING MOUSE

3. Add the mouse sprite into the project and delete the Tobi sprite.
4. To change the direction of the mouse, we will use the **point in direction ()** block. Since the direction vary from 0 to 360 degrees and potentiometer value varies from 0 1023, we have to map the values.

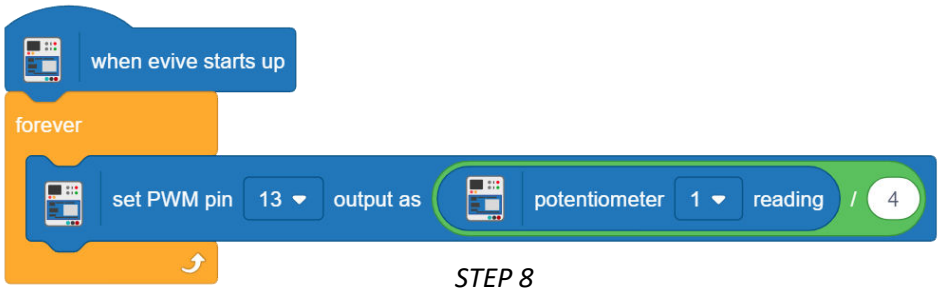
   Direction = ((Potentiometer Value) * 360) / 1023



STEP 7

5. Make the script which sets the mouse direction according the formula above. Add move (10) steps block inside the script to move the mouse as well.
6. Click on the green flag to start the script.

CONTROLLING THE BRIGHTNESS OF LED



STEP 8

7. Make the script using **when flag clicked** block, which repeatedly sets the PWM (brightness) of the LED 13 according to the potentiometer reading. Test the script.
8. To upload the code on evive, change the **when flag clicked** block with **when evive starts up** block.
9. Switch to upload mode and upload the code to evive by clicking on Upload Code button.