

# Project 123



## Coding School



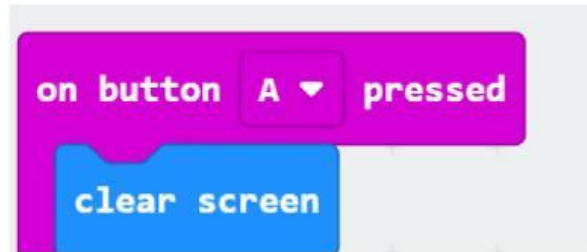
## micro:bit



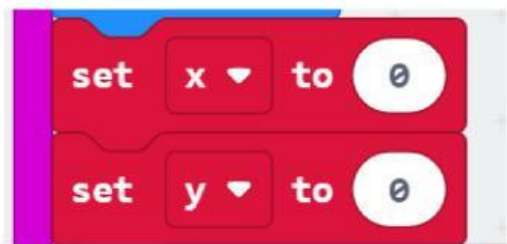
Start here

❖ Prepare the following code to make the following happen when button A is clicked.

- The screen should be clear.



- Let's set up two variables. Set the two variables X and Y as 0.



- Give the value assigned to the X variable for the X value of the bulb to be lit and the value assigned to the Y variable for the y value.



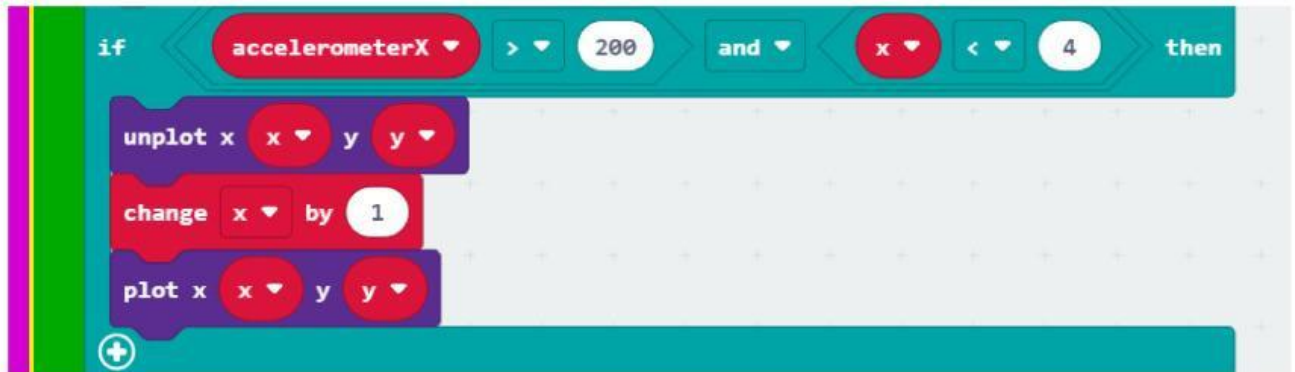
- Prepare the code so that the following events occur while the B button is not pressed.

- Drag a while do block.
- Then drag the Not block under logic.
- Drag the button B is pressed block into the Not block.
- The suffix that goes when the B button is not pressed is done.
- Let's see what happens when the B button is not pressed.
- First, two variables should be set as accelerometerX and accelerometerY and the values of acceleration (mg) X and the value of acceleration (mg) should be assigned in those variables respectively.



- If the value assigned to the accelerometerX variable is greater than 200 and the value of the X variable is less than 4, the bulb corresponding to the value assigned to the X variable for the X value and the value assigned to the Y variable for the y value should be turned off.

- Then the X variable should change by 1.
- Then for the X value, the value assigned to the X variable at that time and the value assigned to the Y variable for the y value should be lit.



- If the value assigned to the accelerometerX variable is less than -200 and the value of the X variable is greater than 0, the bulb corresponding to the value assigned to the X variable for the X value and the value assigned to the Y variable for the y value should be turned off.
- Then 1 should be subtracted from 0 for the X variable and the resulting value should be received.
- Then for the X value, the value assigned to the X variable at that time and the value assigned to the Y variable for the y value should be lit.

```
if accelerometerX < -200 and x > 0 then
  unplot x
  change x by 1
  plot x
```

- If the value assigned to the accelerometerY variable is greater than 200 and the value of the Y variable is less than 4, the bulb corresponding to the value assigned to the X variable for the X value and the value assigned to the Y variable for the y value should be turned off.
- Then the X variable should change by 1.
- Then for the X value, the value assigned to the X variable at that time and the value assigned to the Y variable for the y value should be lit.

```
if accelerometerY > 200 and y < 4 then
  unplot x
  change y by 1
  plot x
```

If the value assigned to the accelerometerY variable is less than -200 and the value of the Y variable is greater than 0, then the bulb corresponding to the value



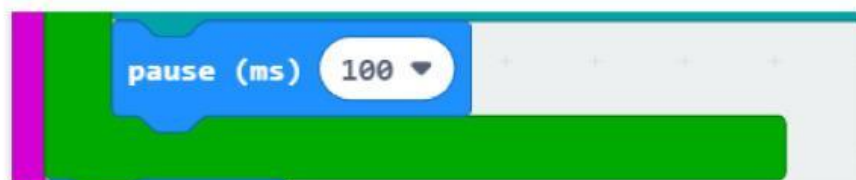
assigned to the X variable for the X value and the value assigned to the Y variable for the y value should be turned off.

- Then for the Y variable, 1 should be subtracted from 0 and the resulting value should be received.
- Then for the X value, the value assigned to the X variable at that time and the value assigned to the Y variable for the y value should be lit.



```
if accelerometerY < -200 and y > 0 then
  unplot x x y y
  change y by 0 - 1
  plot x x y y
```

- After 0.1 seconds the above events should occur.



```
pause (ms) 100
```

- Then add the following code to clear the screen.



```
clear screen
```