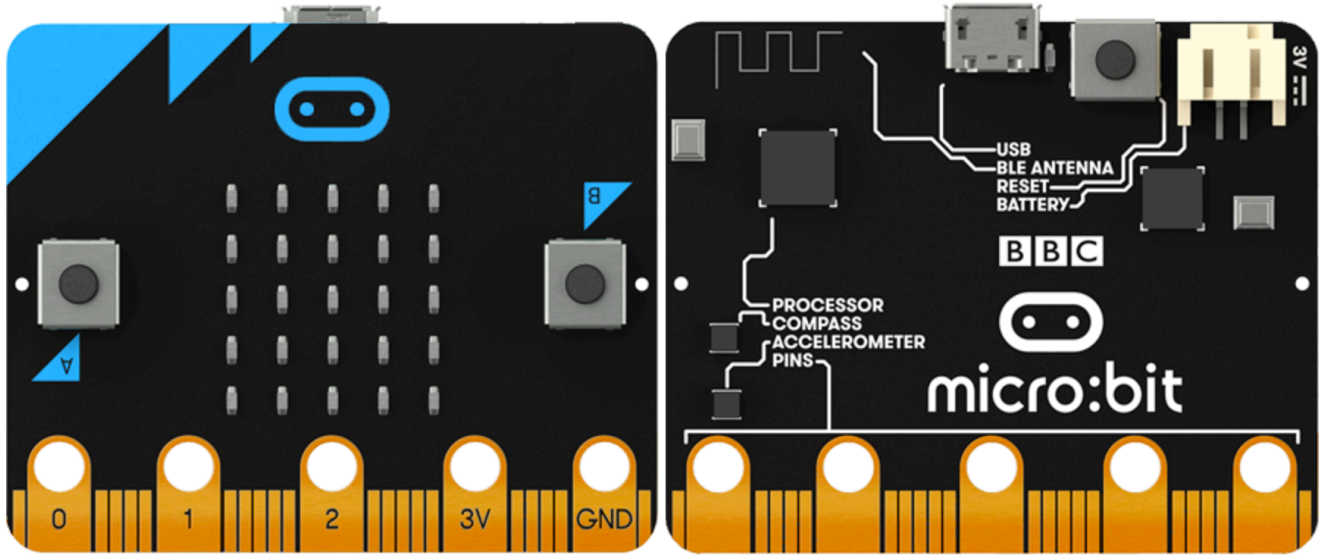
PLAYCODING



micro:bit

Contents

- About the BBC micro:bit
- Basic Block 

- Flashing heart
- Smiley button
- Love meter
- Rock Paper & Scissors

basic

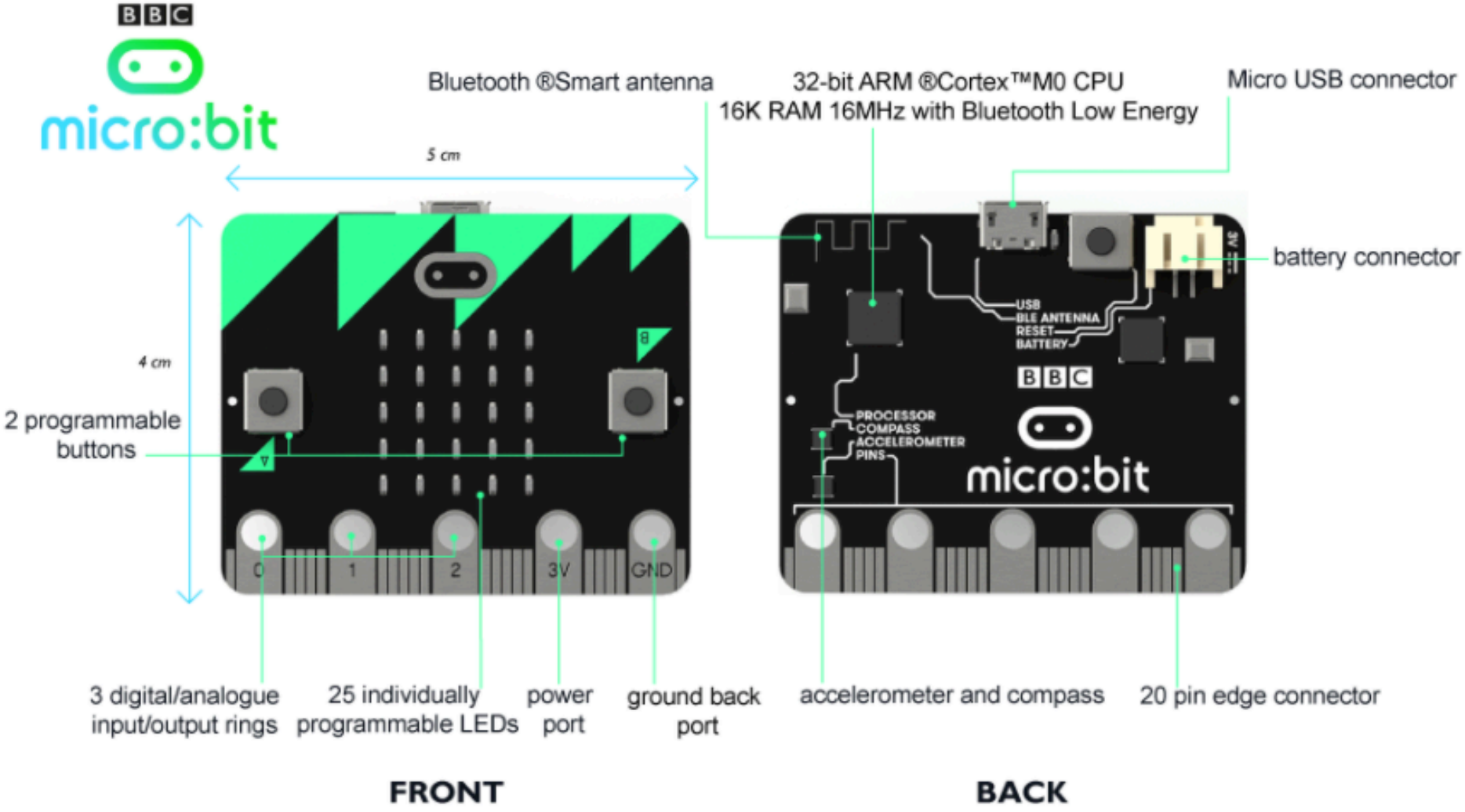
Provides access to basic micro:bit functionality.

Flashing Heart

Smiley Buttons

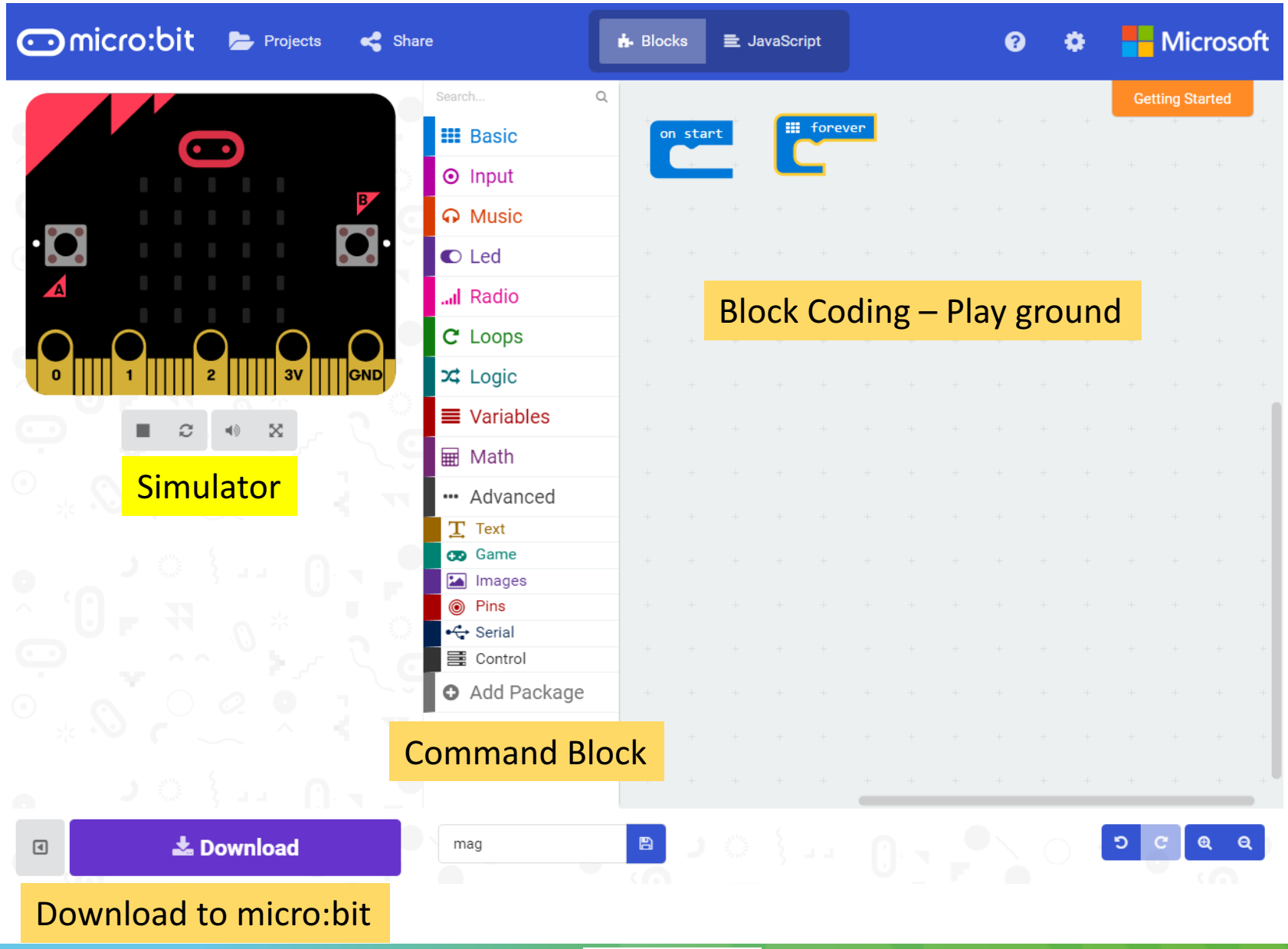
Love Meter

About the BBC Micro:bit



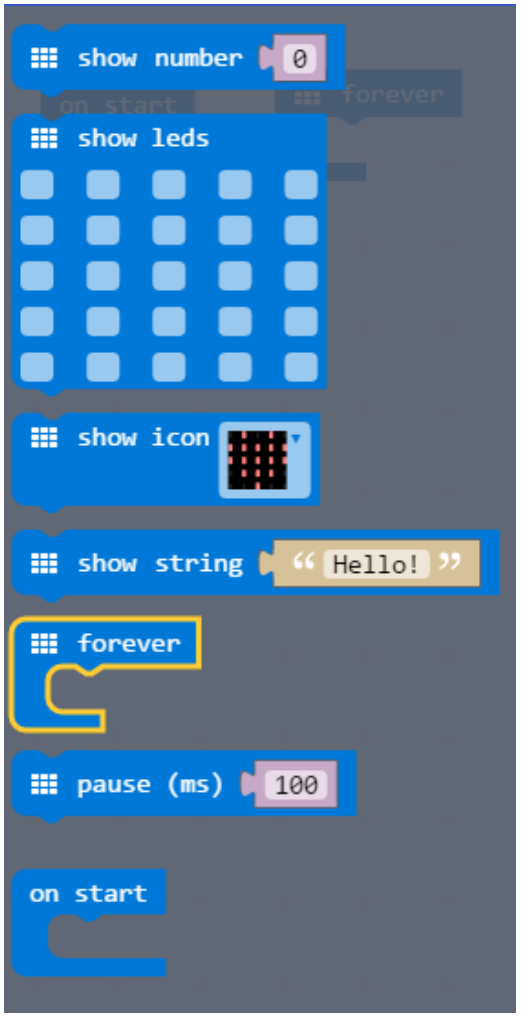
About the BBC Micro:bit

www.microbit.org



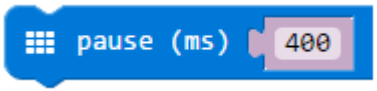
Basic Block

Basic



Keep running part of a program [in the background](#).

An event that runs when the program starts.
The **on start** is a special event that runs when the program starts, before any other event. Use this event to initialize your program.

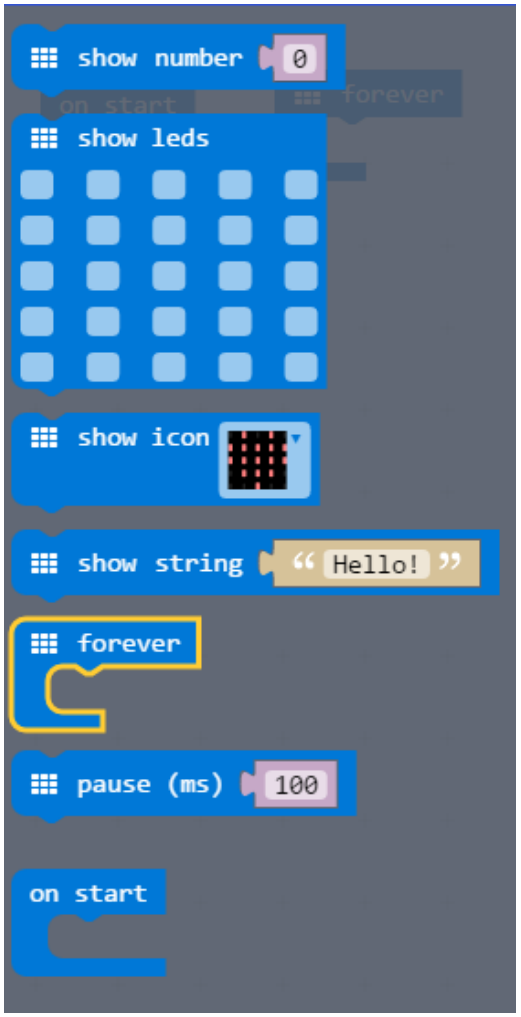


Pause the program for the number of milliseconds you say. You can use this function to slow your program down.

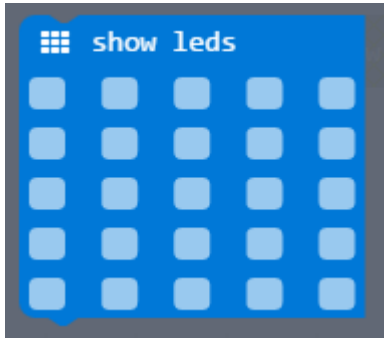
- **ms is the number of milliseconds that you want to pause**
- **(100 milliseconds = 1/10 second, and 1000 milliseconds = 1 second).**

Basic Block

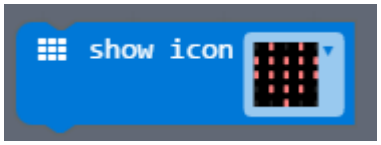
Basic



Show a number on the LED screen.
It will slide left if it has more than one digit.

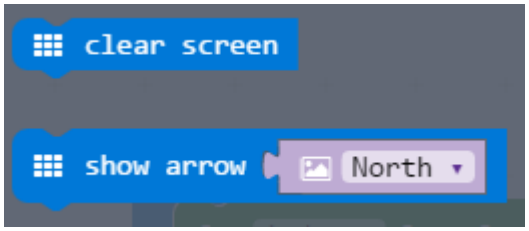


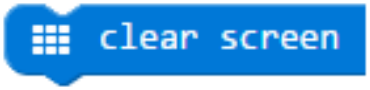
Shows a picture on the LED screen.



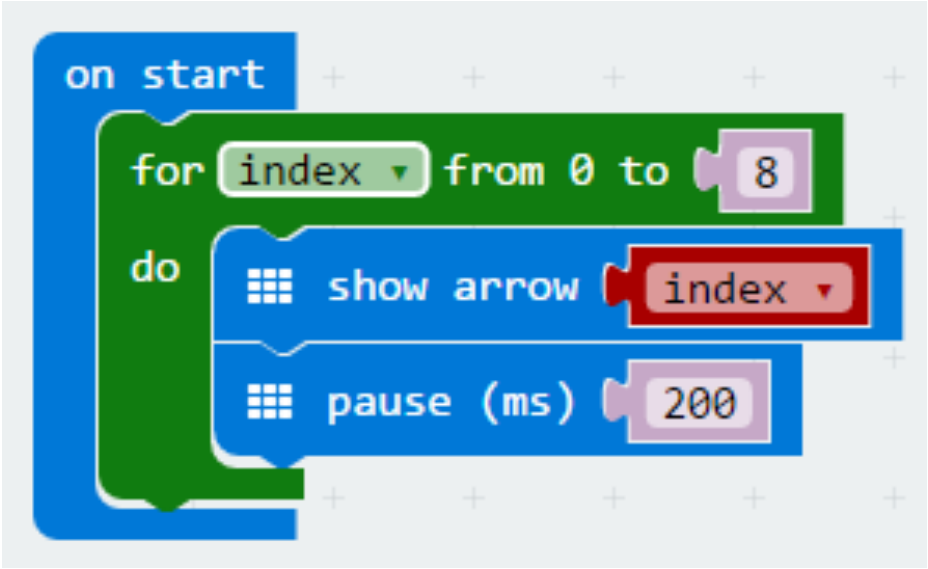
Shows the selected icon on the LED screen

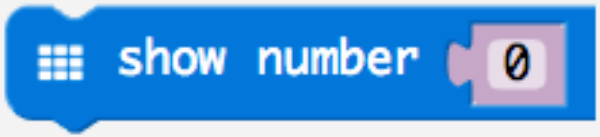
Show a number on the LED screen. It will slide left if it is bigger than the screen.





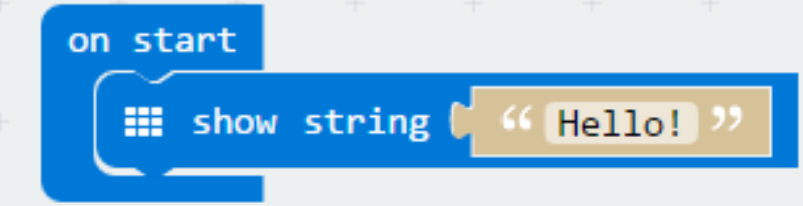
Turn off all the LED lights on the LED screen.

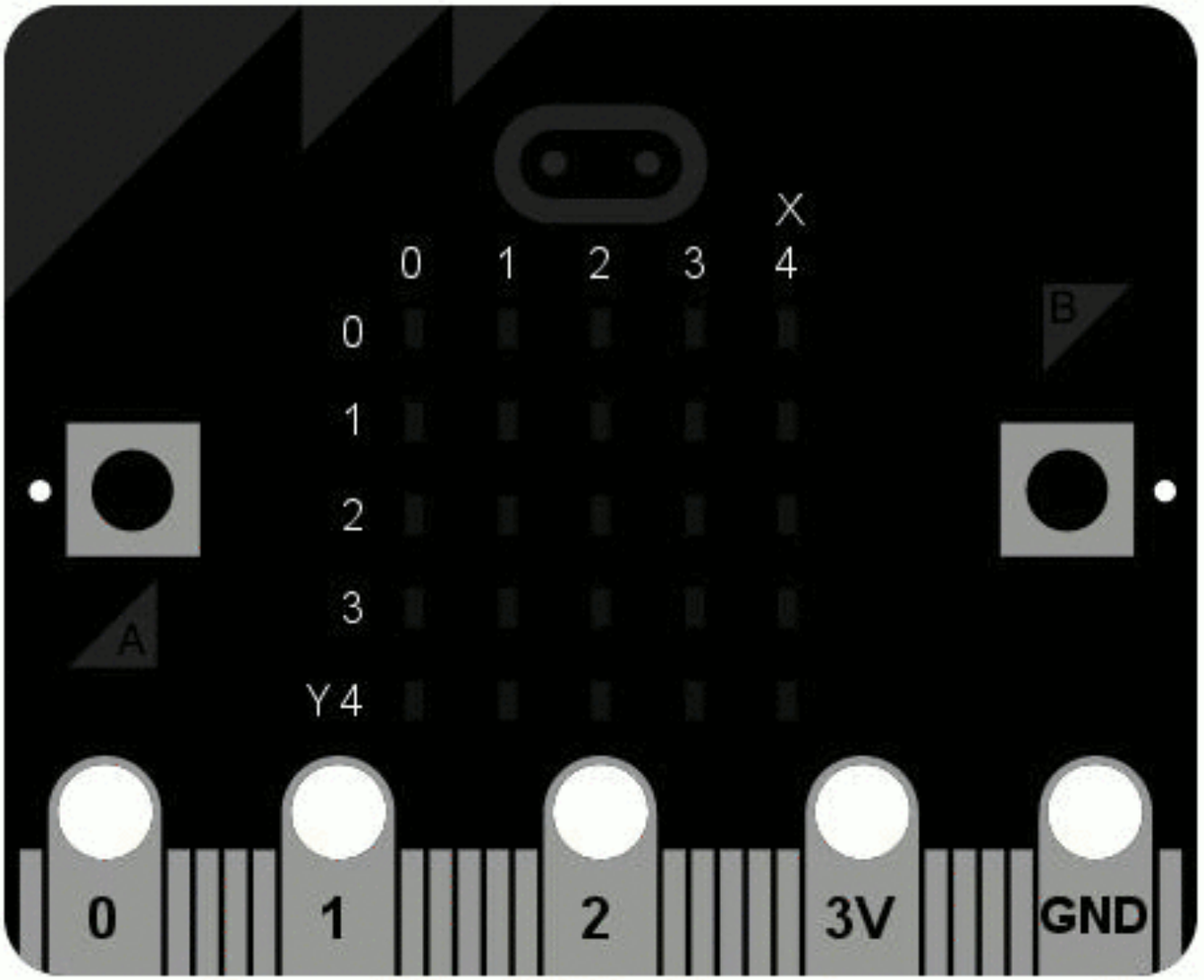




basic

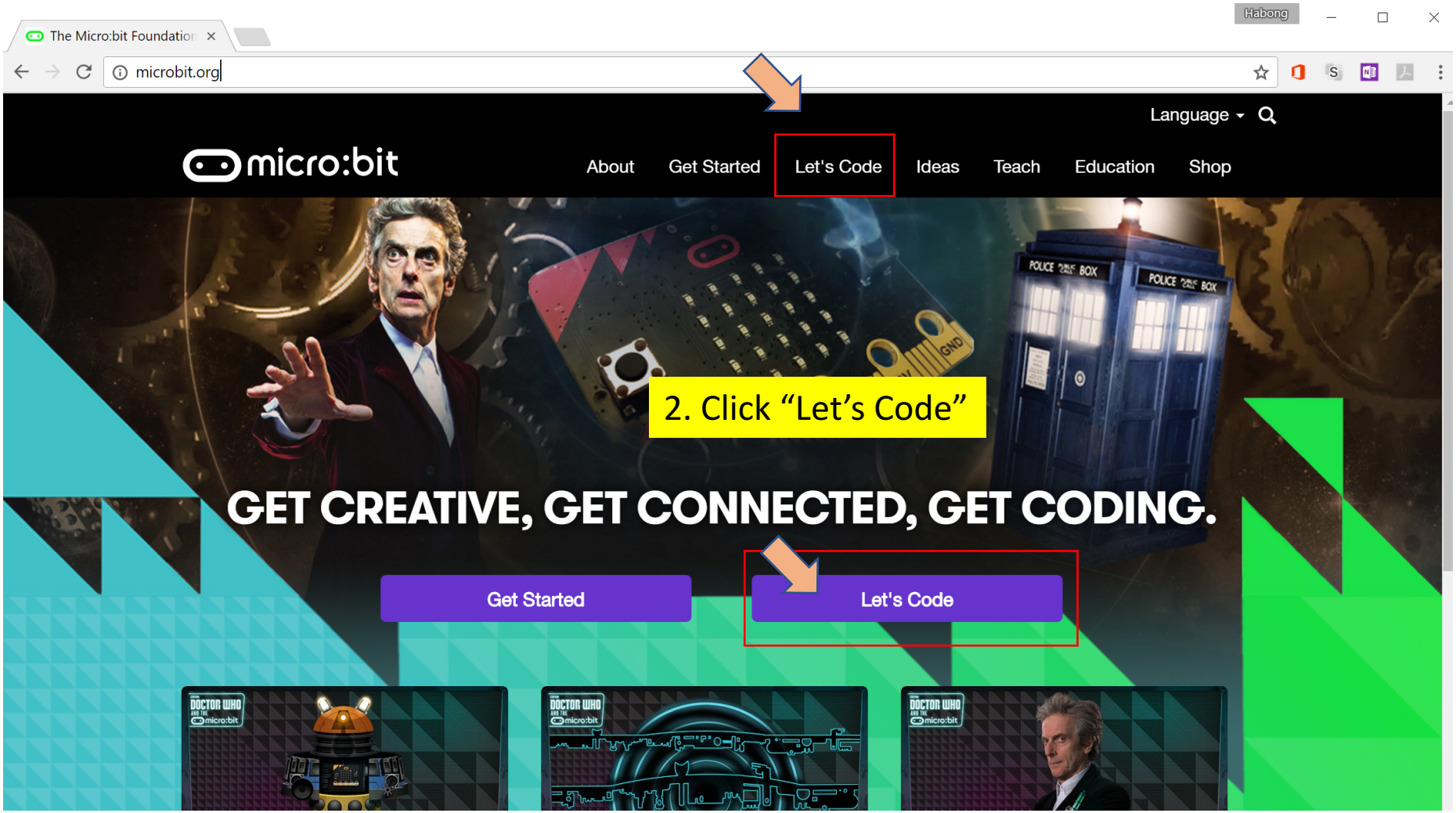
Provides access to basic micro:bit functionality.


on start
show string
“ Hello! ”

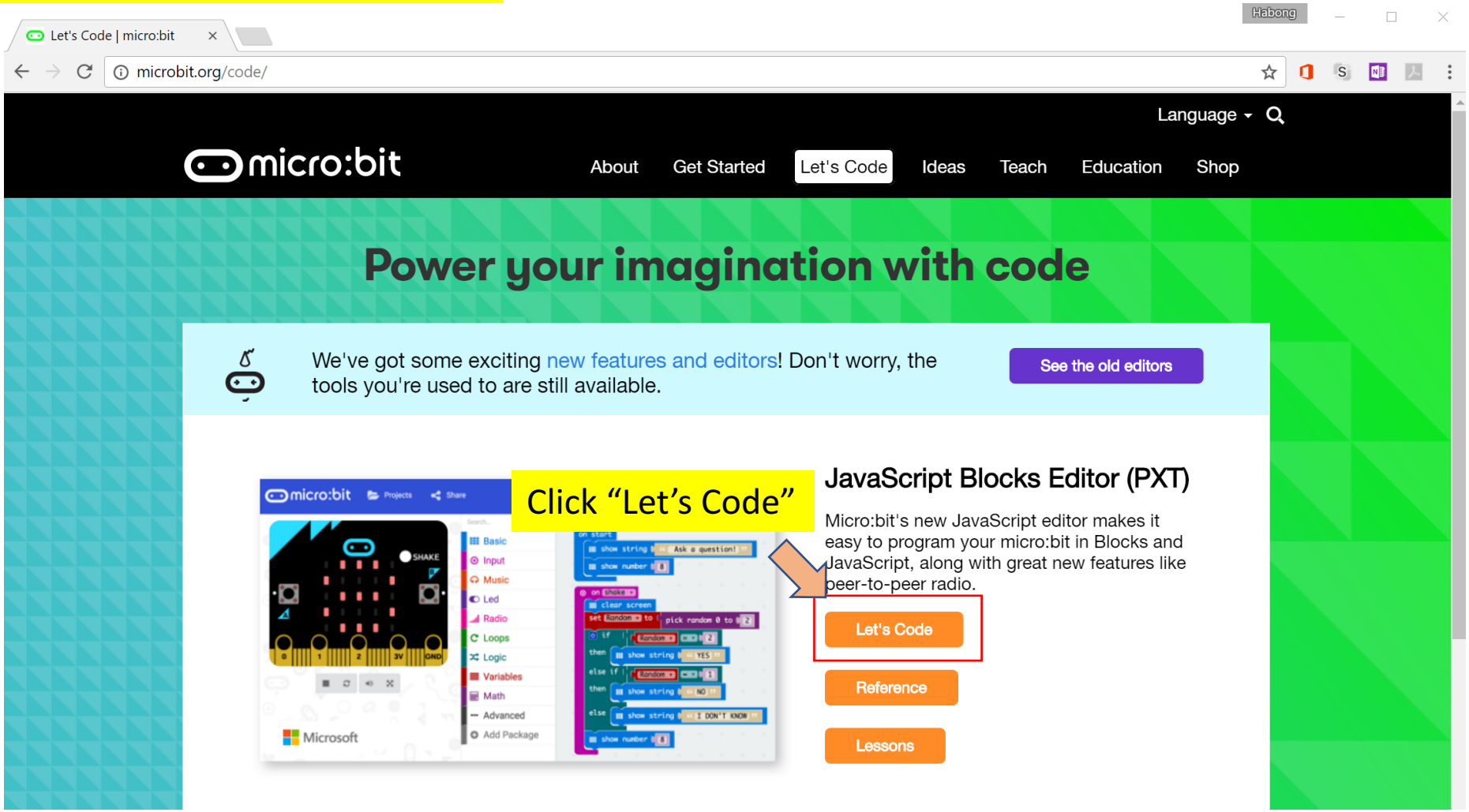

X
0 1 2 3 4
0
1
2
3
Y 4
A
B
0
1
2
3V
GND

Hello micro:bit

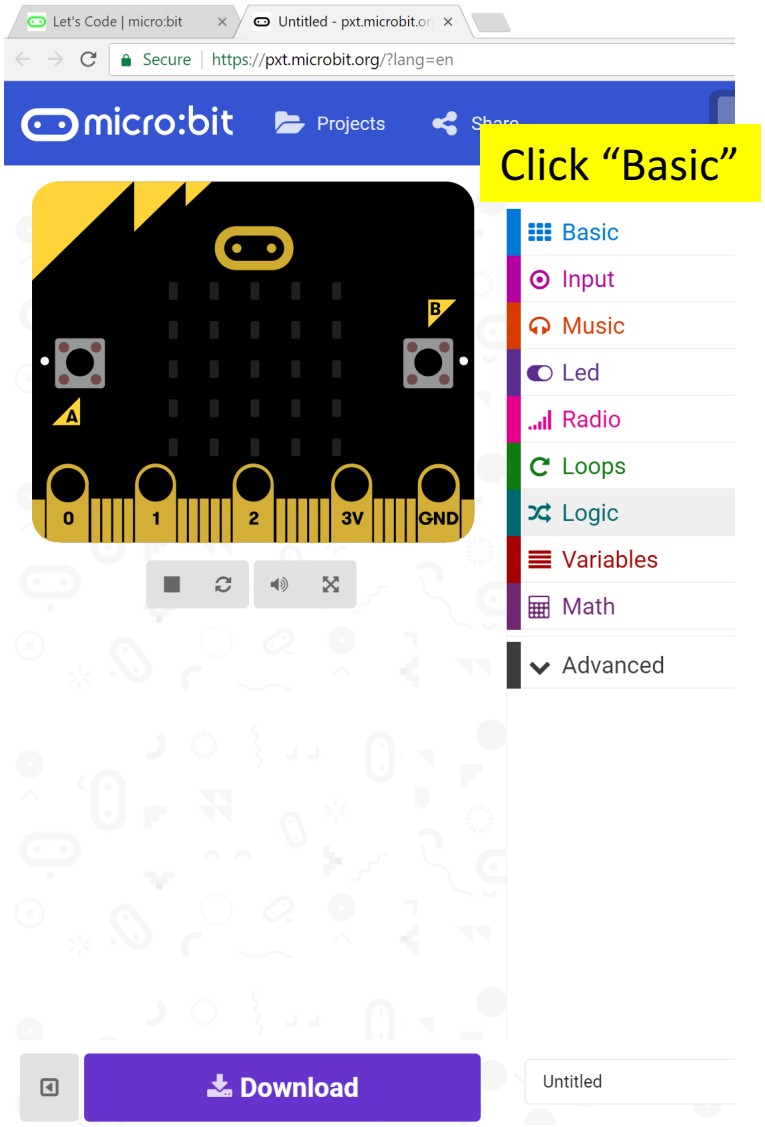
1. Go to the webpage at http://microbit.org/

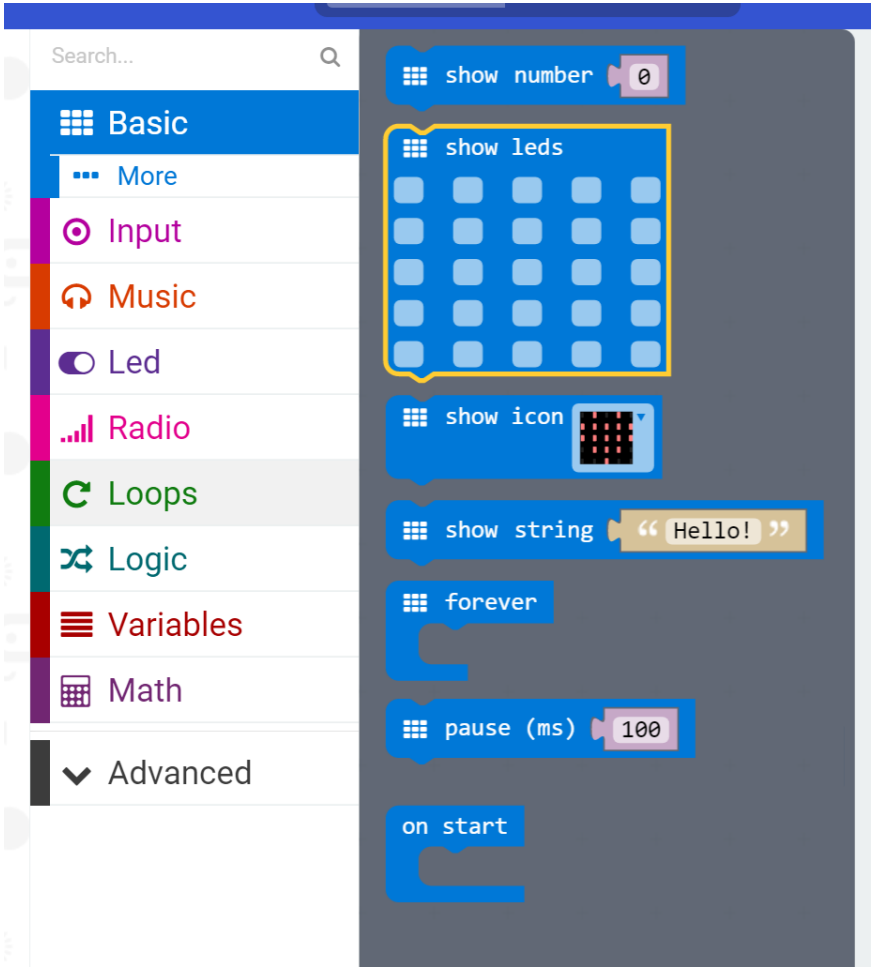


3. JavaScrip Blocks Editor (PXT)

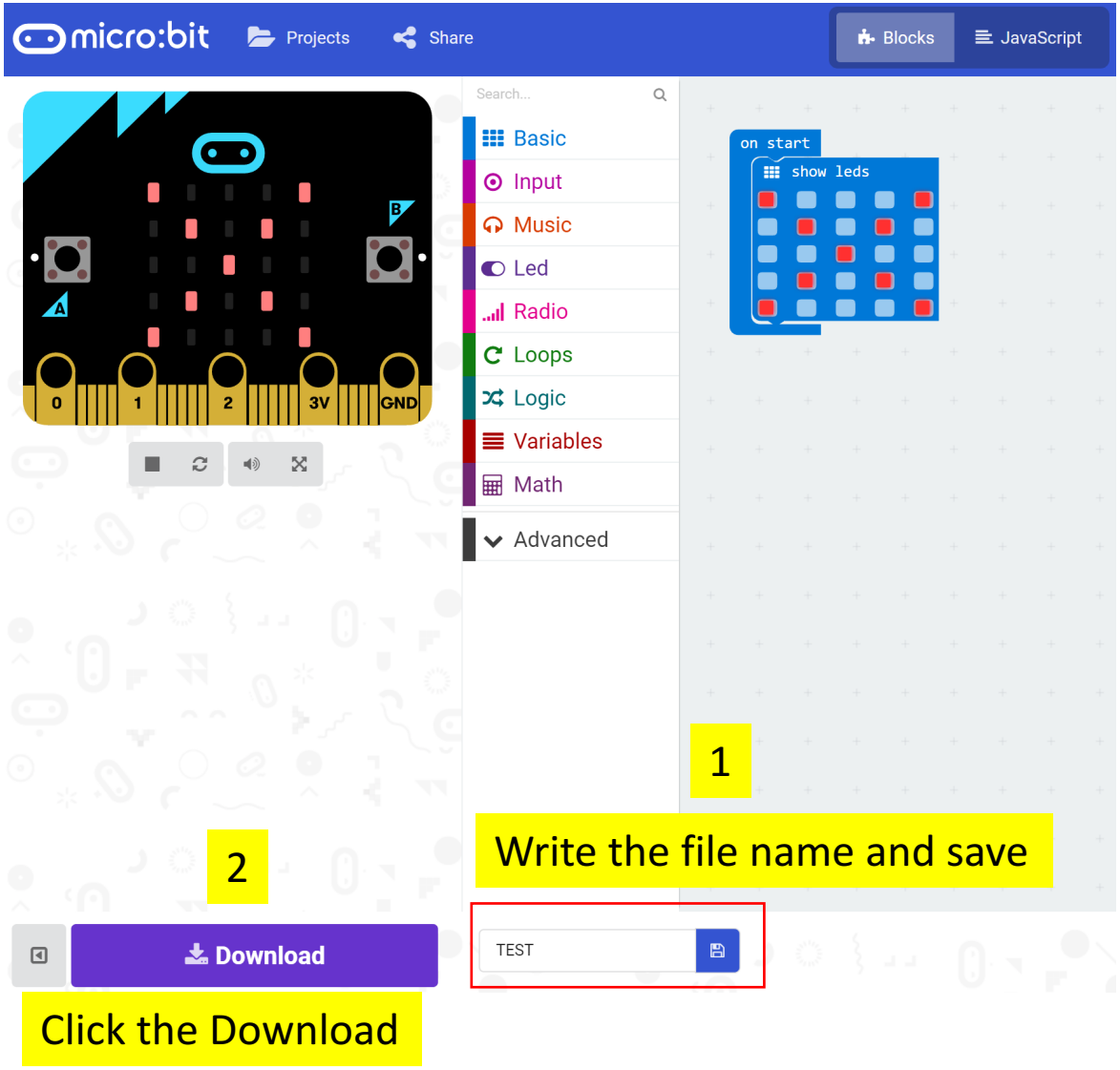


4. JavaScrip Blocks Editor (PXT)

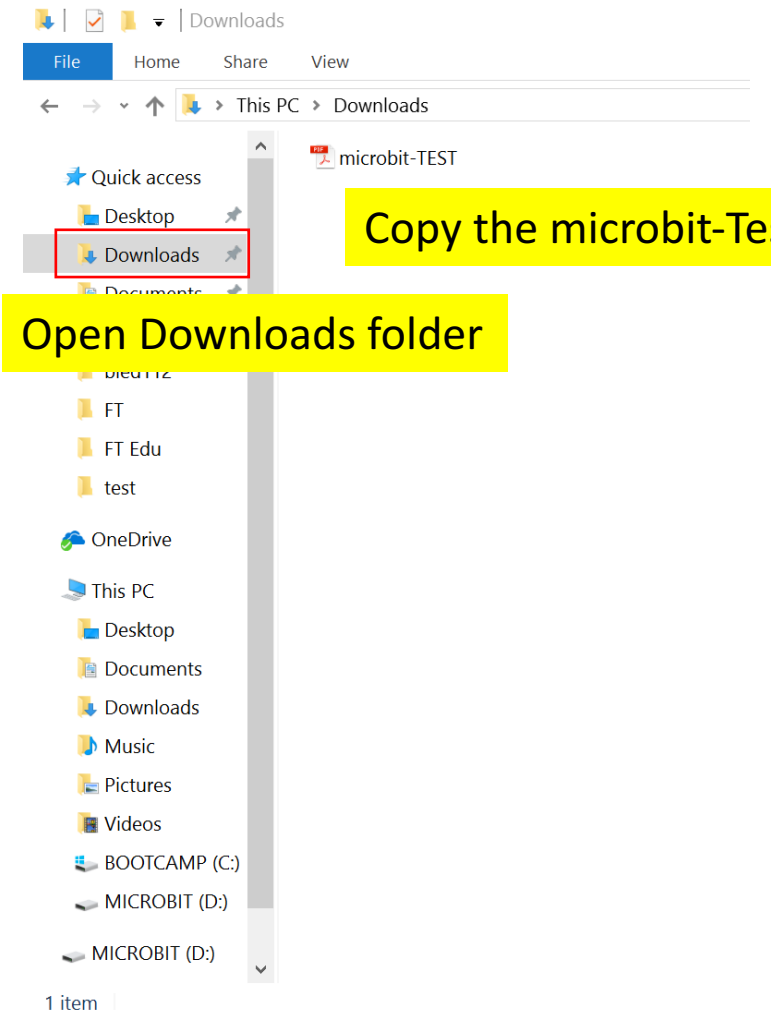




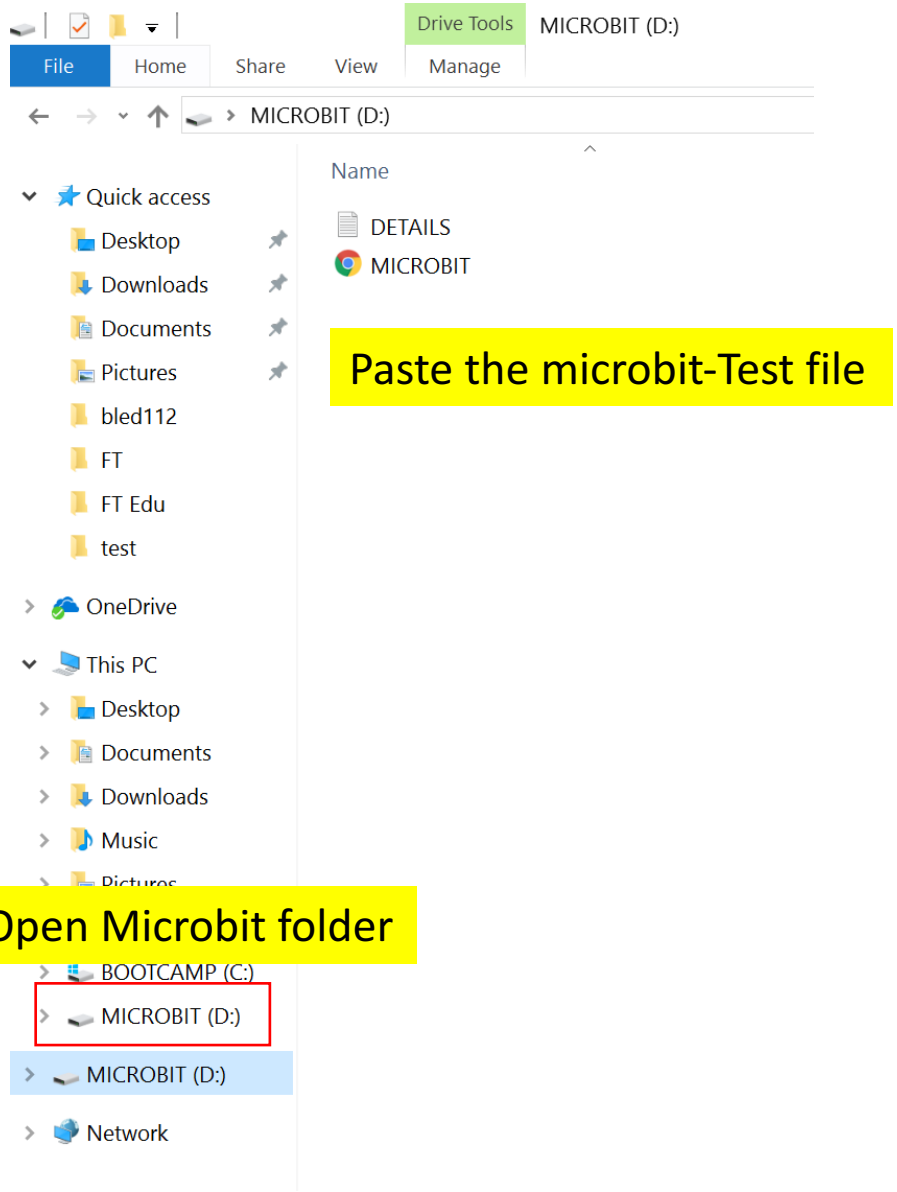
4. JavaScrip Blocks Editor (PXT)



5. Open download folder



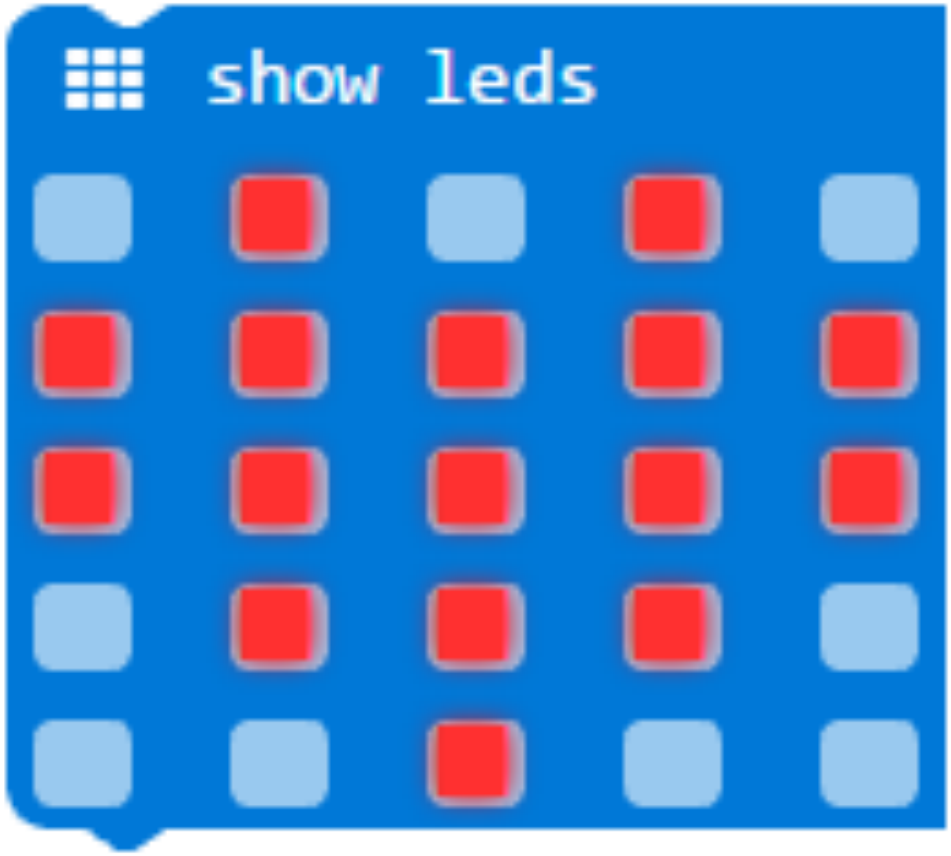
6. Open microbit folder




Flashing Heart

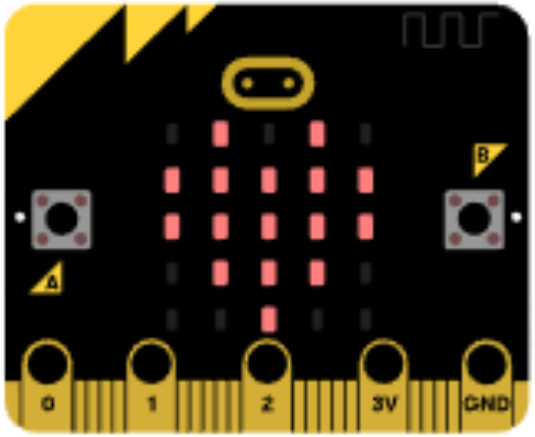
Step 1

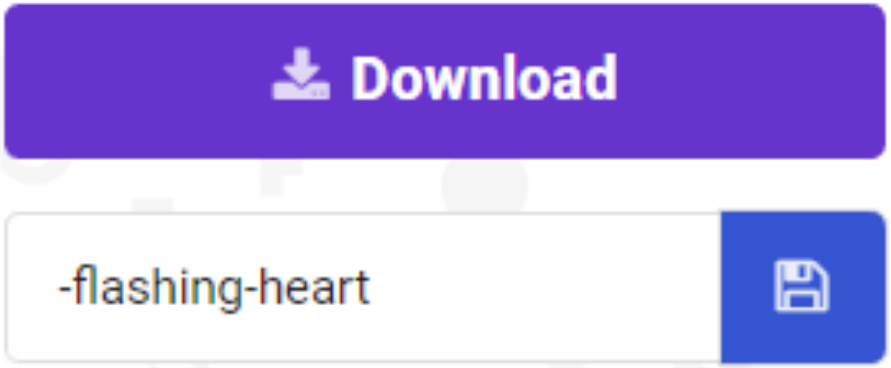
Place the show leds block and paint a heart.



Step 2

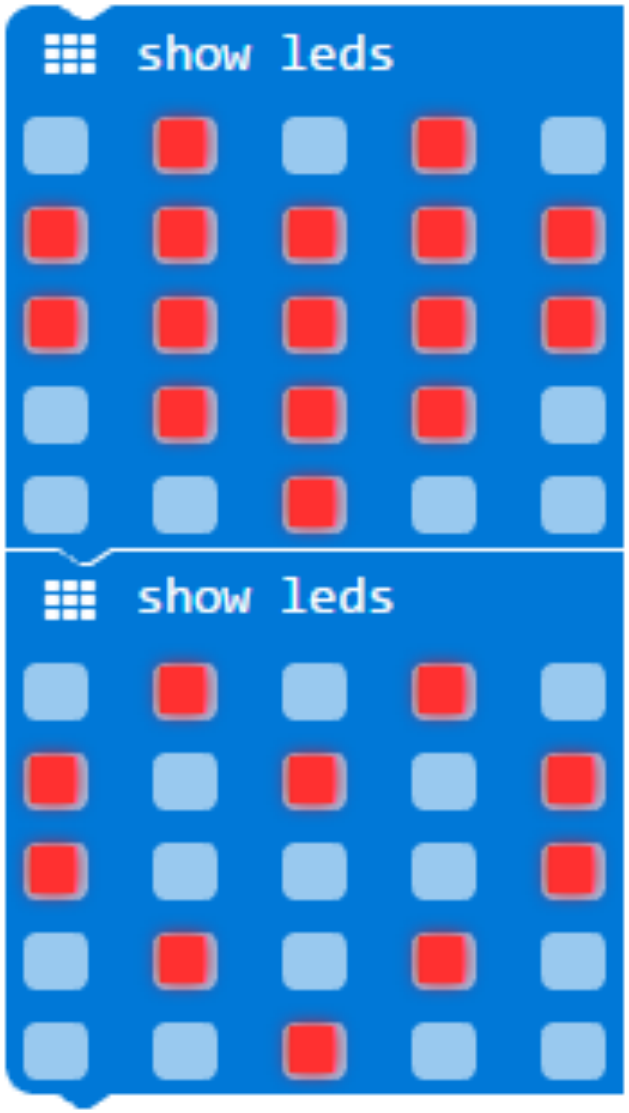
Click Download to transfer your code in your micro:bit!





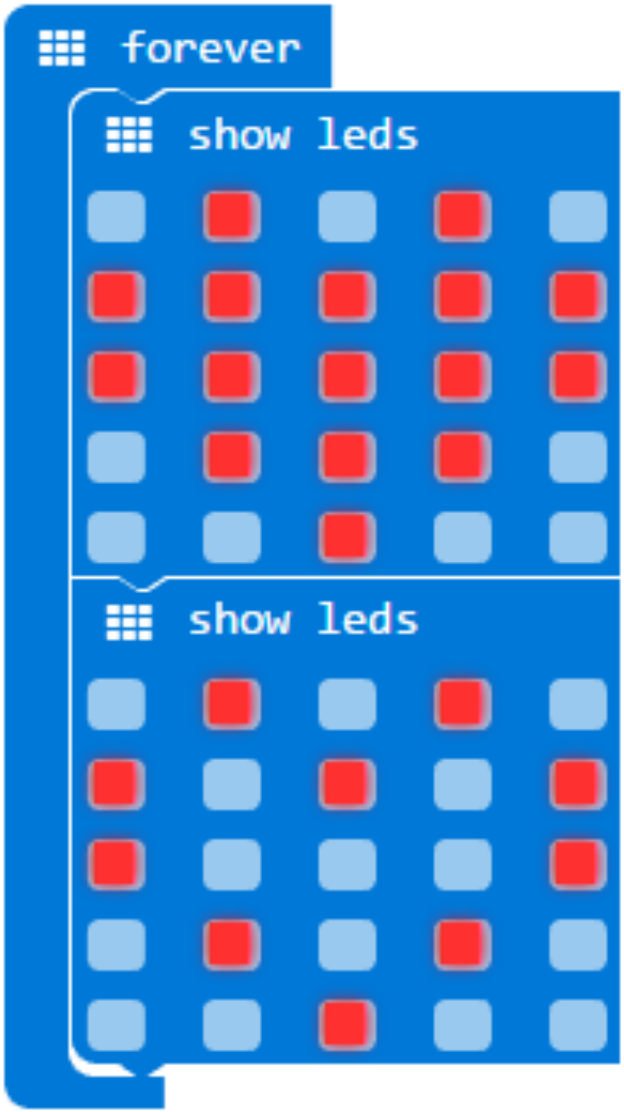
Step 3

Place another show leds block under the heart to make it blink.



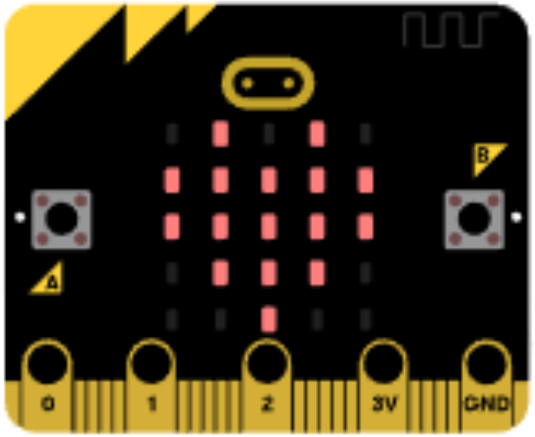
Step 4

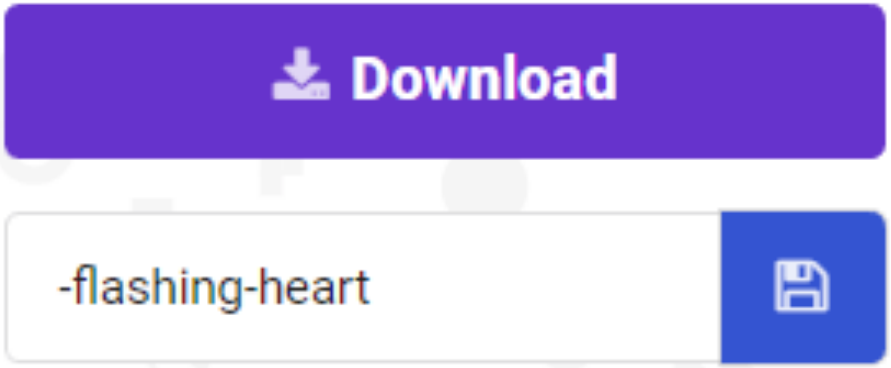
Place the blocks inside the forever to repeat the animation.



Step 5

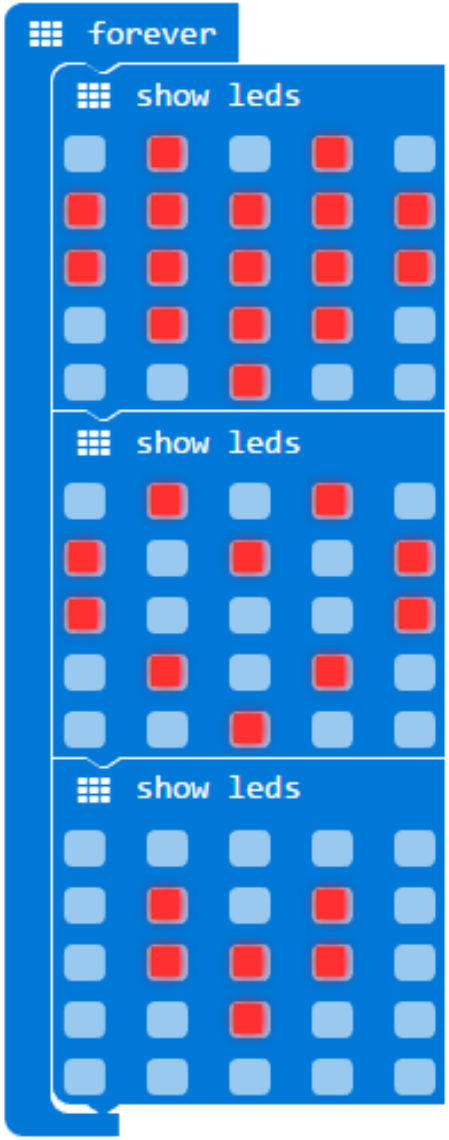
Click Download to transfer your code in your micro:bit!





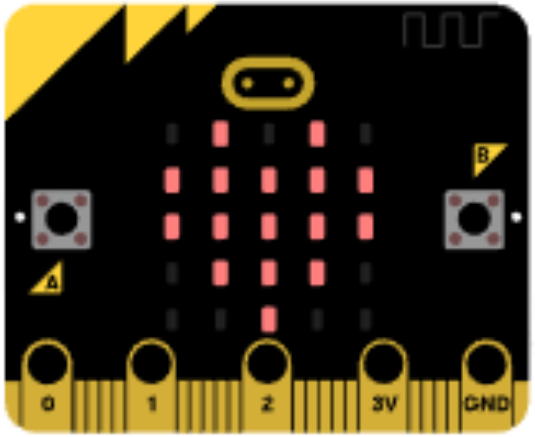
Step 6

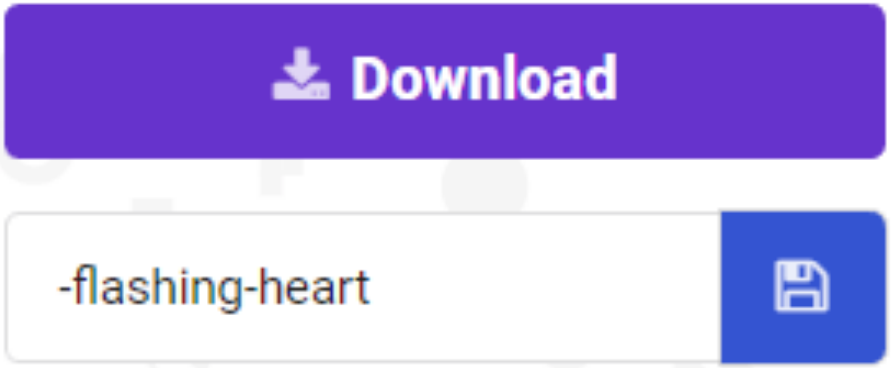
Place more show leds blocks to create your own animation.



Step 7

Click Download to transfer your code in your micro:bit!



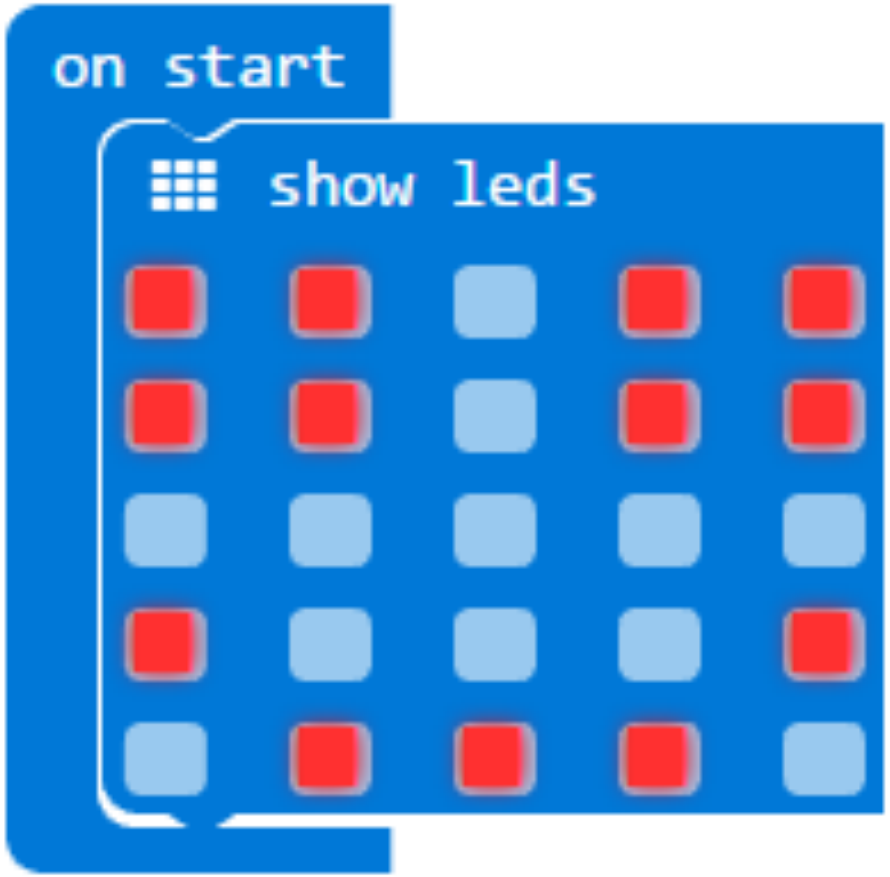


Use buttons to show a smiley face!

Smiley Buttons

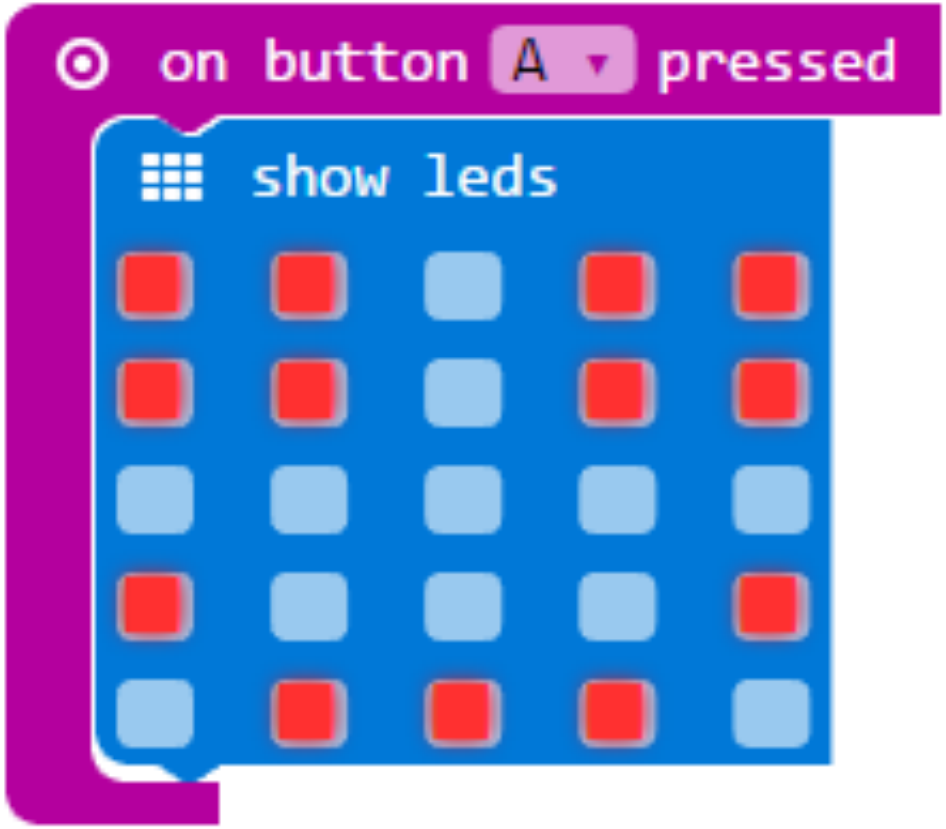
Step 1

Use show leds to make a smiley face:



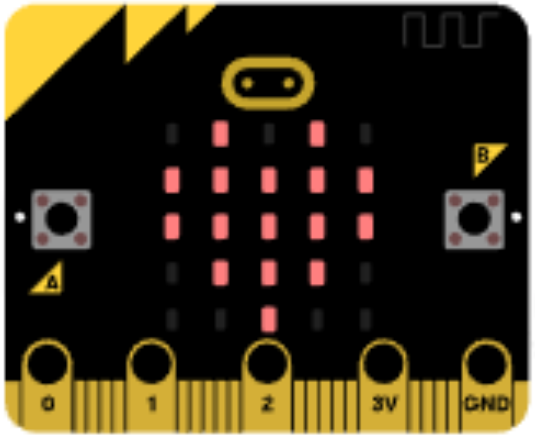
Step 2

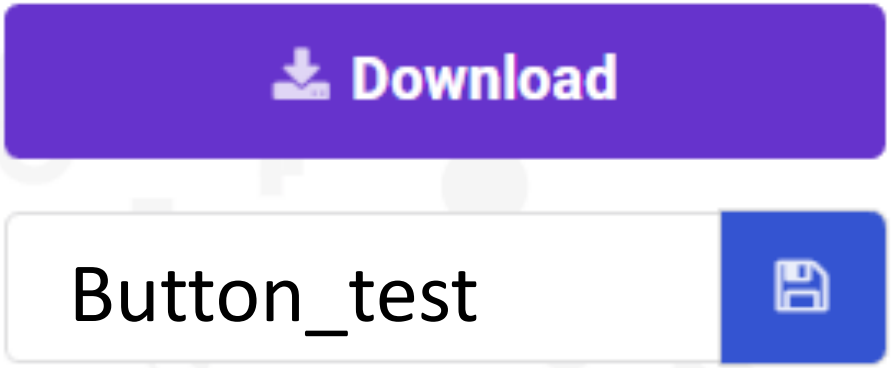
Add an input block for when button A is pressed, and **move** the smiley face inside it:



Step 3

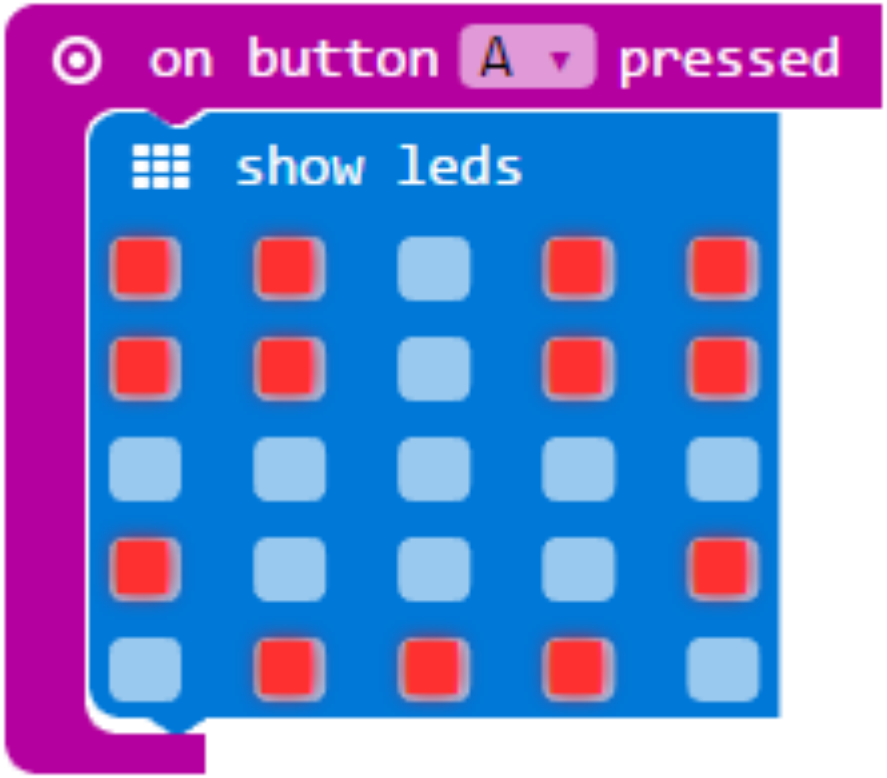
Click Download to transfer your code in your micro:bit!

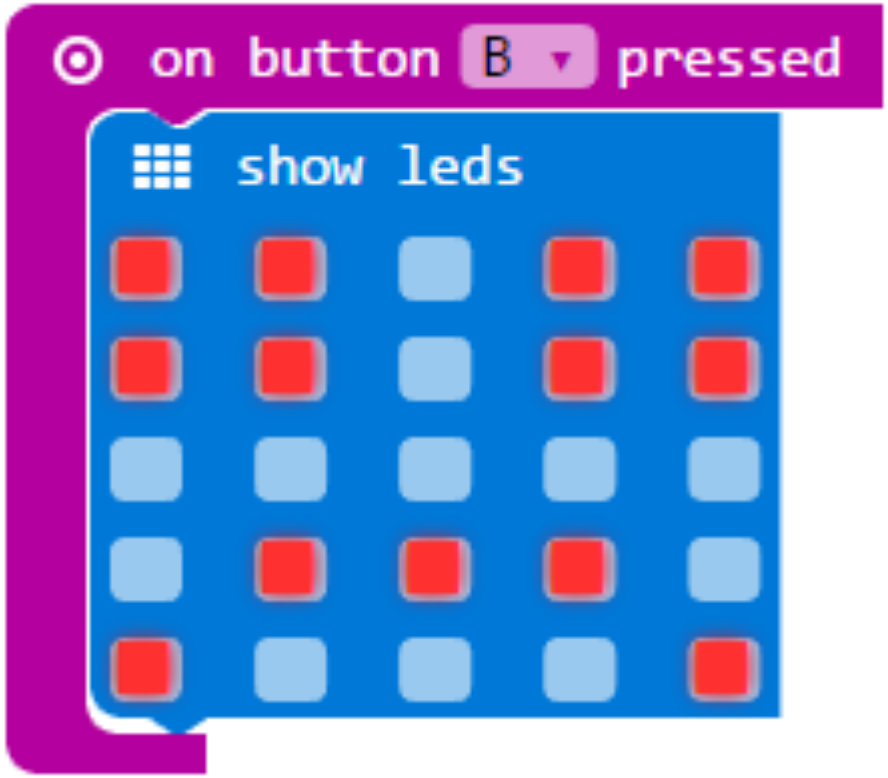




Step 4

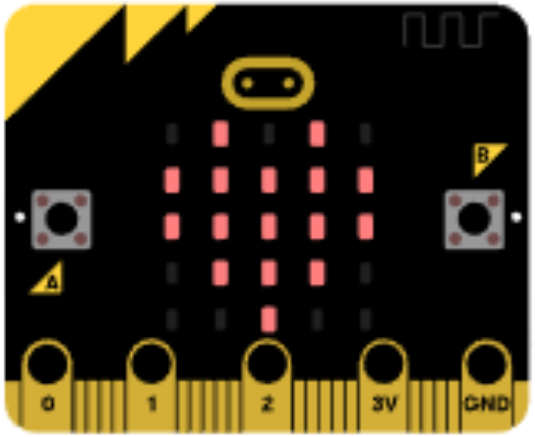
Add blocks so that when button B is pressed, a frowney appears:

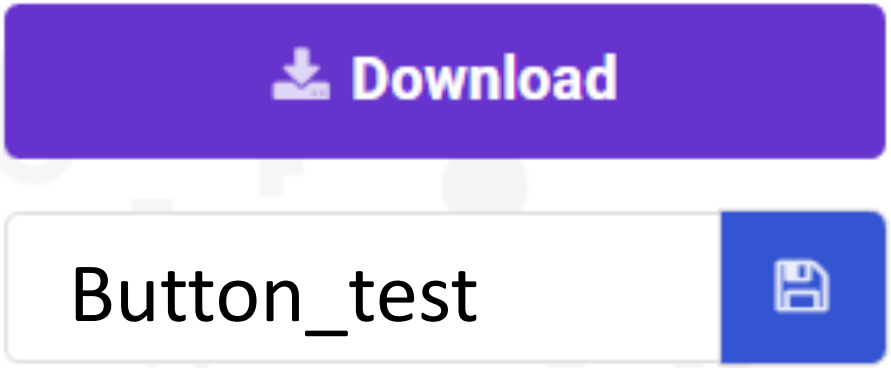




Step 5

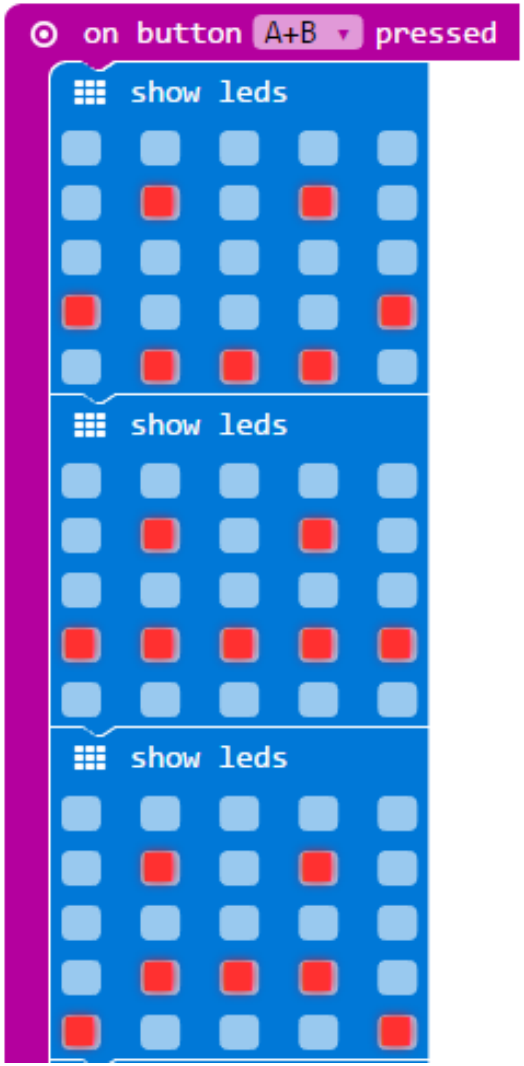
Click Download to transfer your code in your micro:bit!

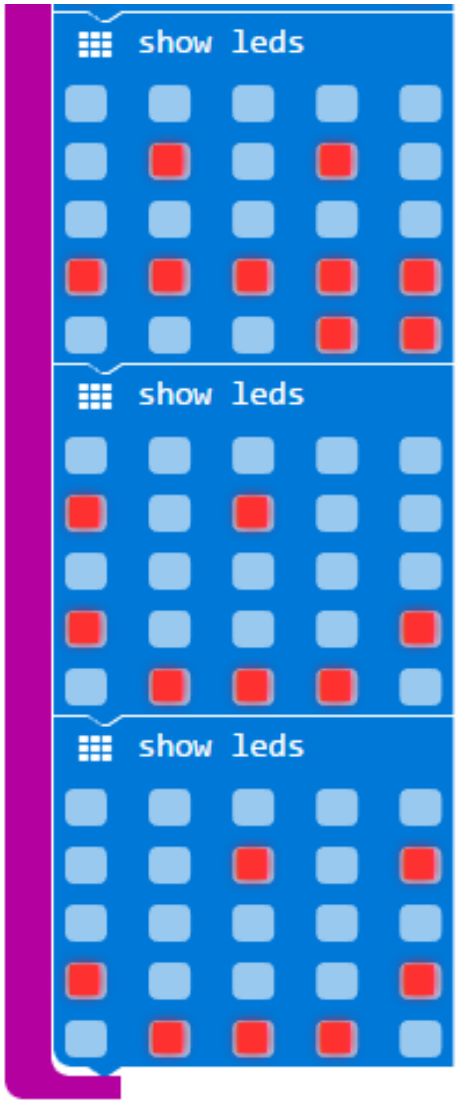




Step 6

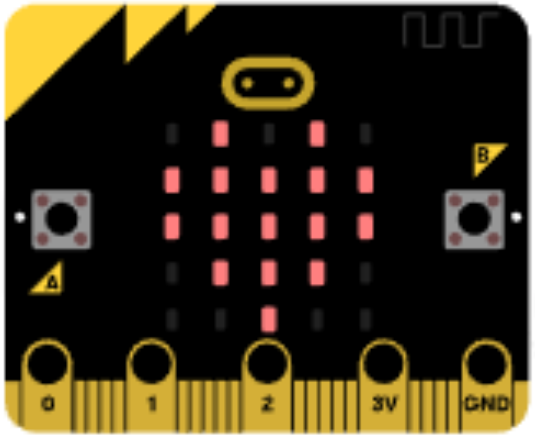
You can also have a secret mode where A and B are pressed together.

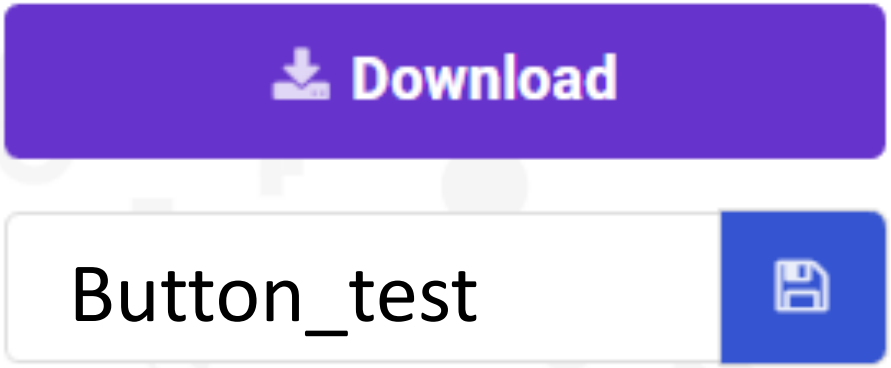




Step 7

Click Download to transfer your code in your micro:bit!



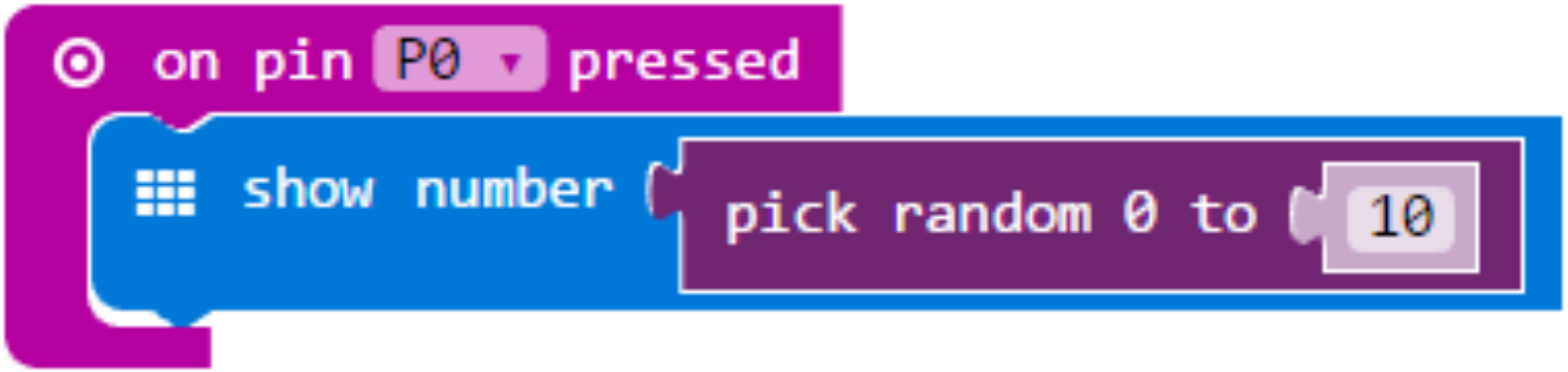


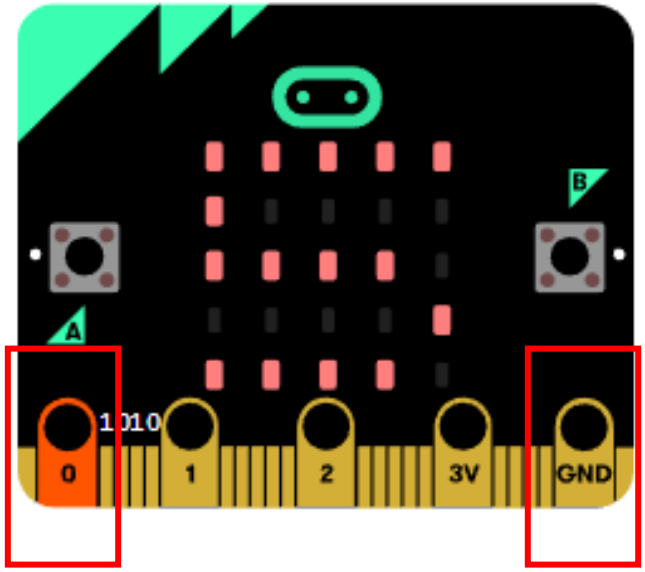
Use pins and your body to change the display!

Love Meter

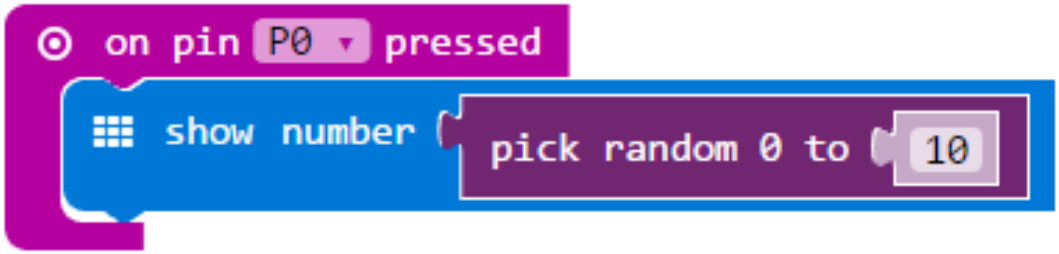
Step 1

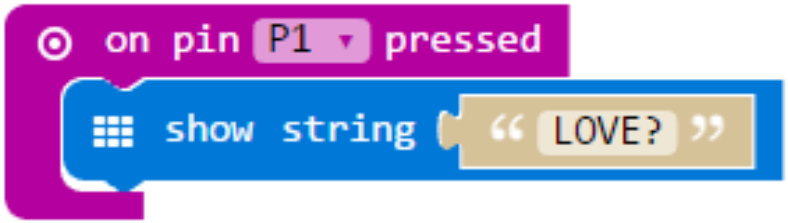
Use on pin pressed to show a random number when pin P0 is pressed (hold the GND pin with other hand):

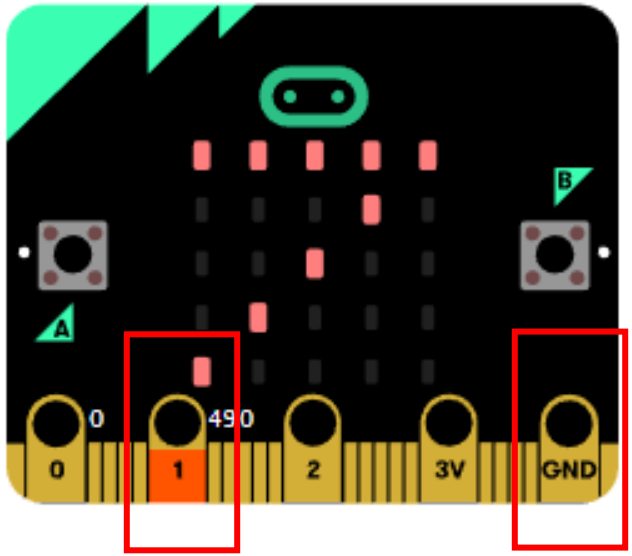




Show a string when pin P1 is pressed:

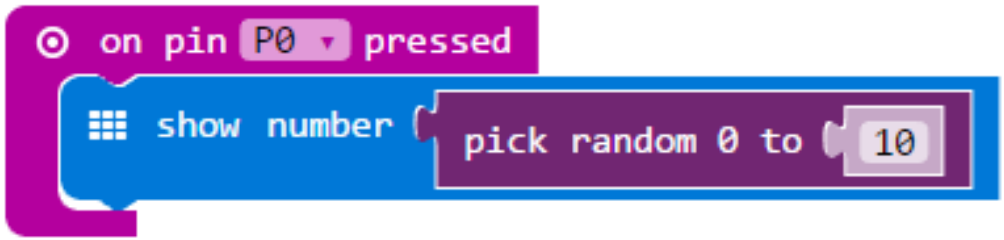


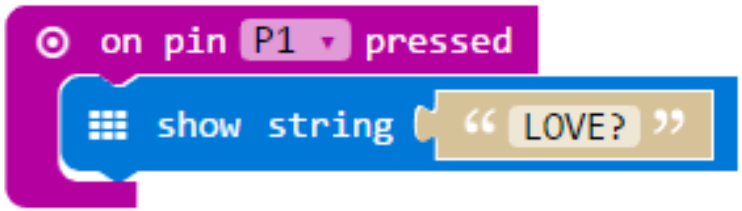


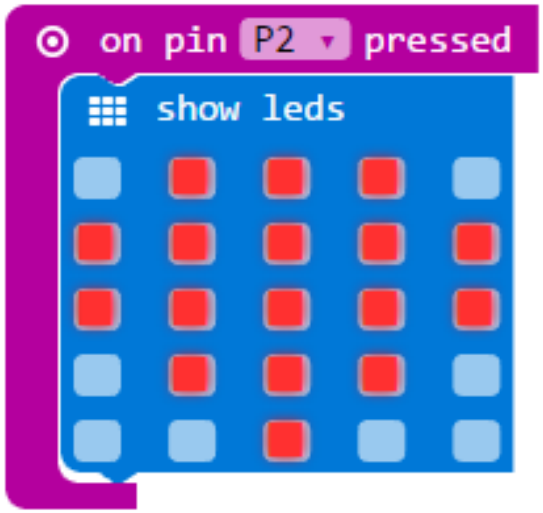


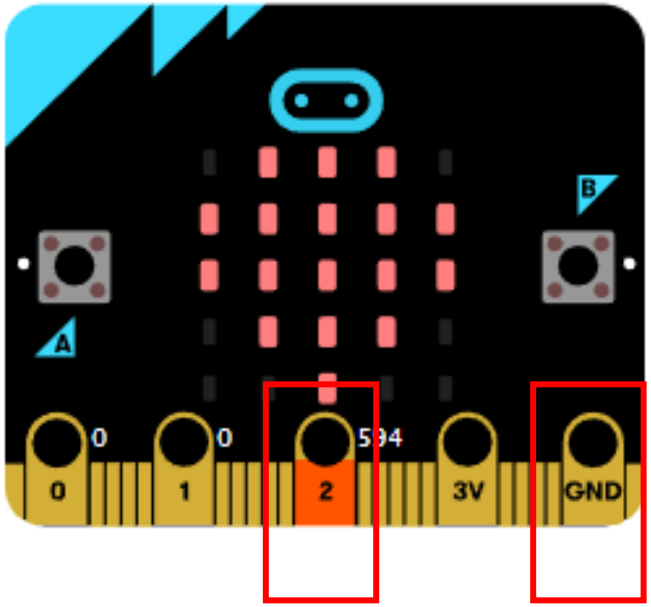
Step 3

Show a heart when pin P2 is pressed:





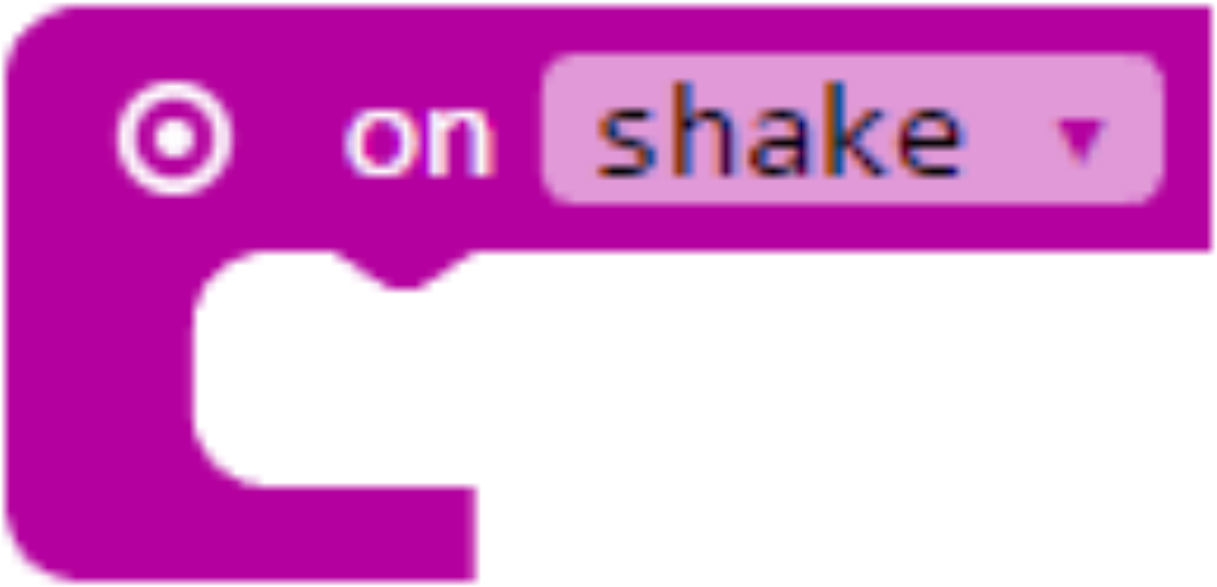




Build a rock paper scissors game!

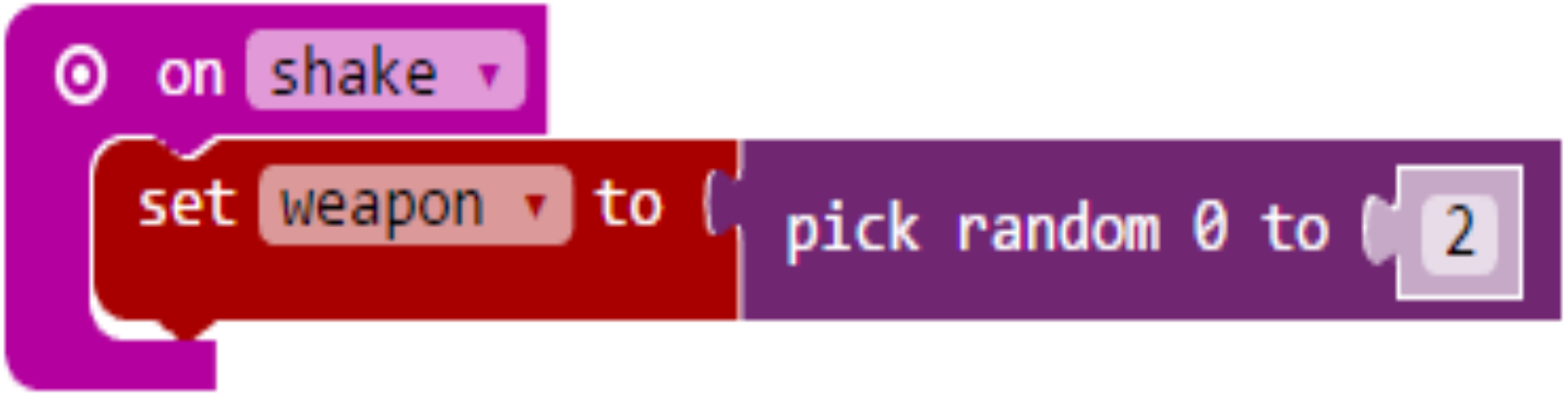
Rock Paper Scissors

Creating an on shake block



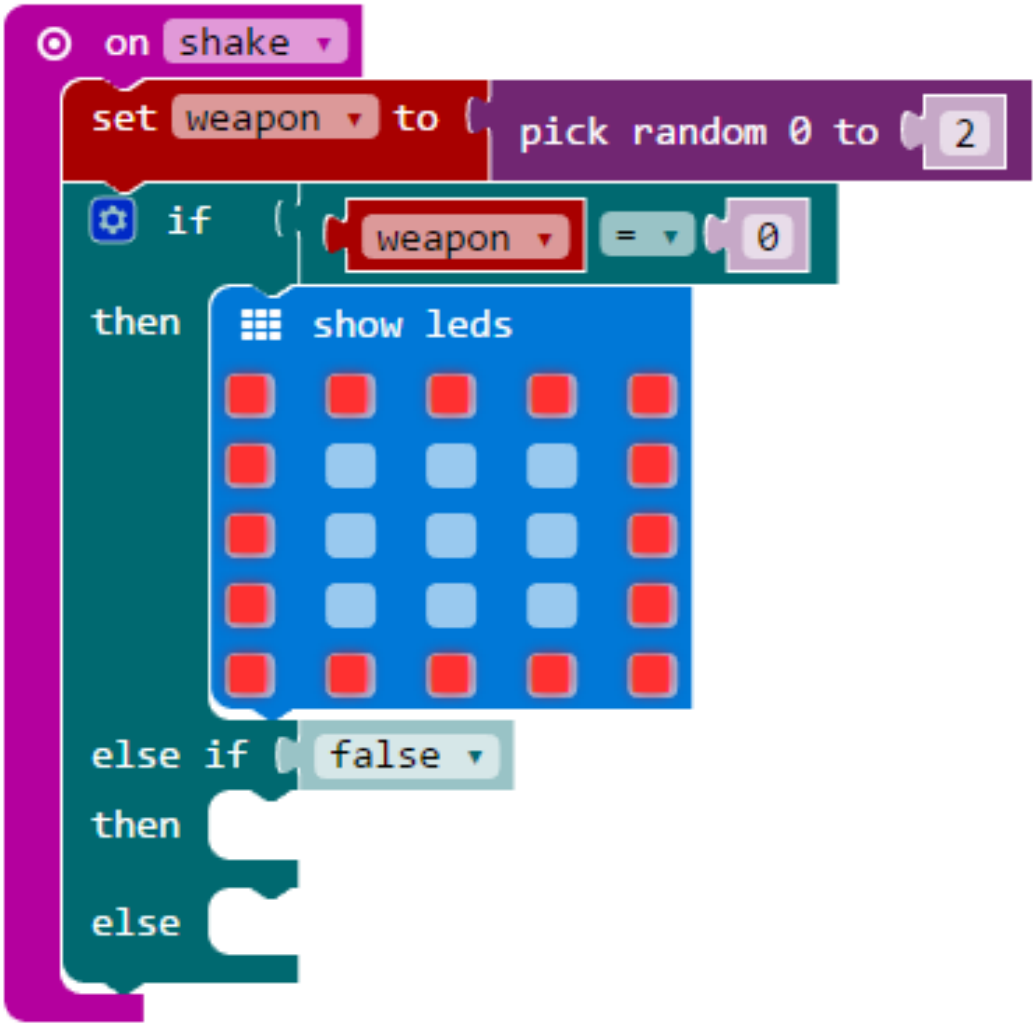
Step 2

Add a set block with a variable. Then add a pick random block, and store the random number in the variable, like this:



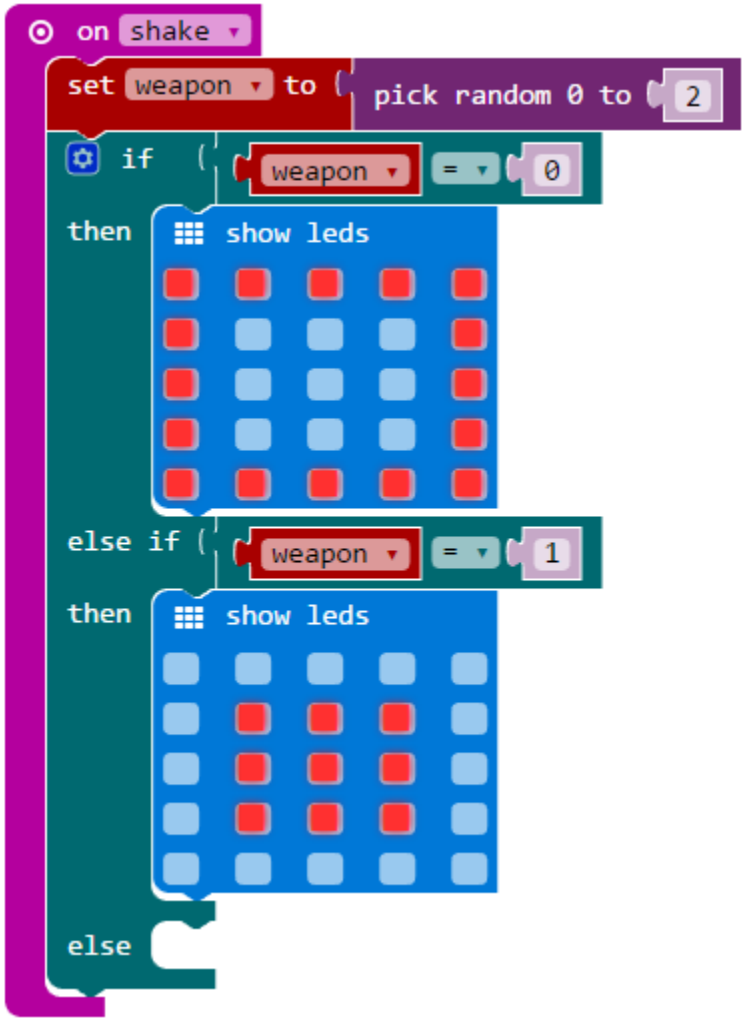
Step 3 - Picking paper

Put an if block after the let block that checks whether weapon is 0.
Make sure the if block has an else if part and an else part.



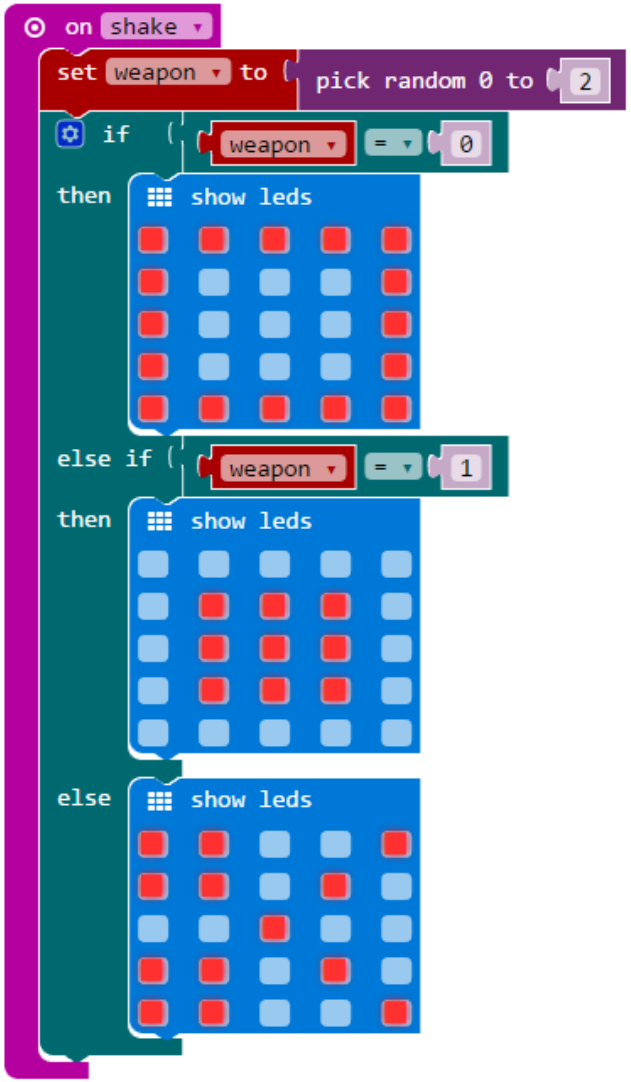
Step 4 - A random rock

Make the else if part check if the variable weapon is 1.
Then add a show leds block with a picture of rock.



Step 5 - Suddenly scissors

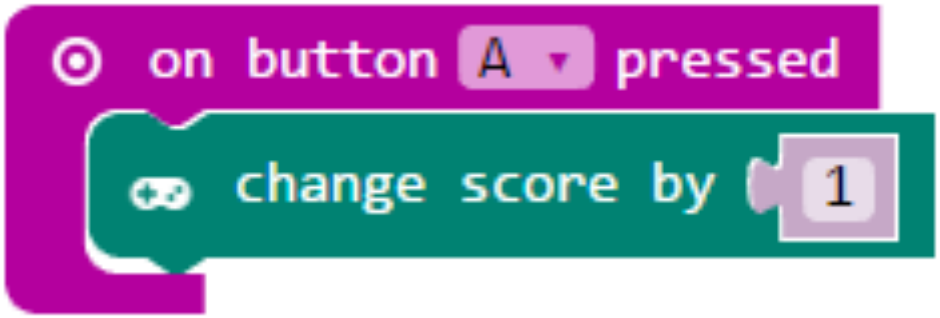
Add a show leds block with a picture of scissors to else part:

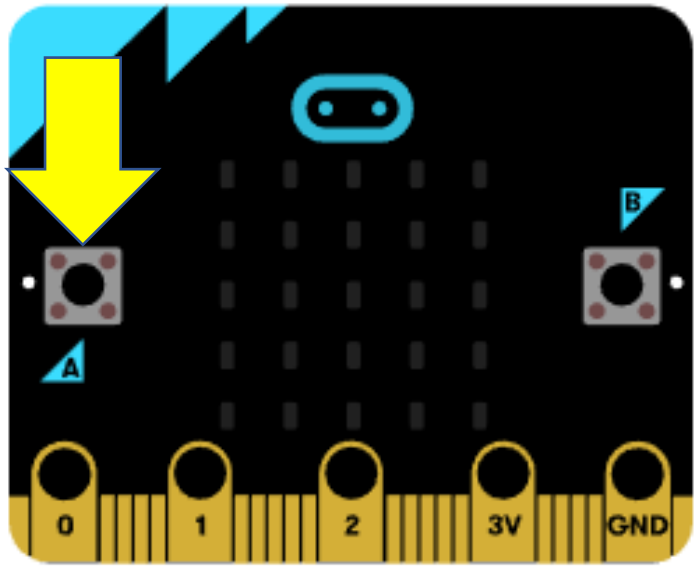


Your game is ready! Have fun!

Step 6 - Are you the greatest?

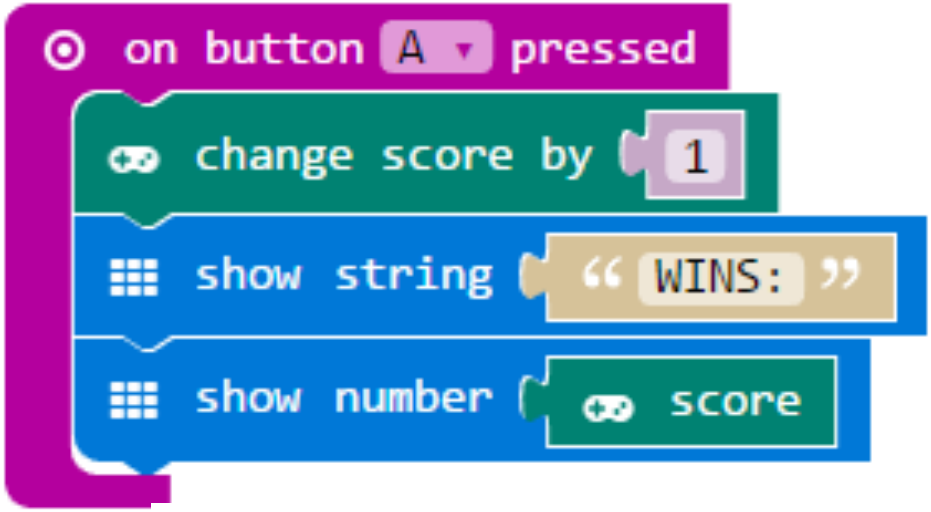
Open the Game drawer, and then add the block change score by 1

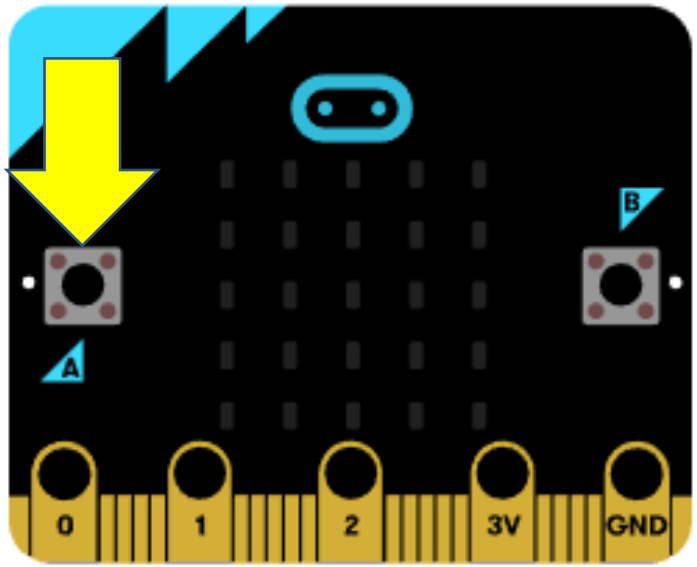




Step 7 - Prove you're the greatest !

After you micro:bit can add 1 to the score, show how many win you have





Step 8 - Staying honest

Open the Game drawer, and then add the block change score by -1