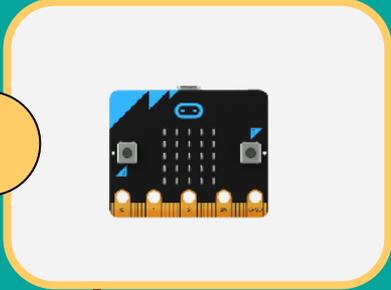




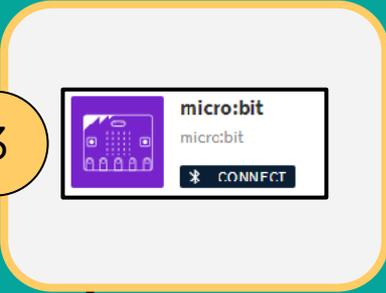
1

Click 'ADD DEVICE'
Select device(s) from list



2

Connect the micro:bit battery



3

Click 'CONNECT'



4

Select device from list
Click 'Pair'

Use the data given to plot a visual output

```
program start
on micro:bit plot X: 0 Y: 0
on micro:bit plot X: 4 Y: 0
on micro:bit plot X: 1 Y: 1
on micro:bit plot X: 1 Y: 3
on micro:bit plot X: 2 Y: 2
on micro:bit plot X: 3 Y: 1
on micro:bit plot X: 3 Y: 3
on micro:bit plot X: 0 Y: 4
on micro:bit plot X: 4 Y: 4
```

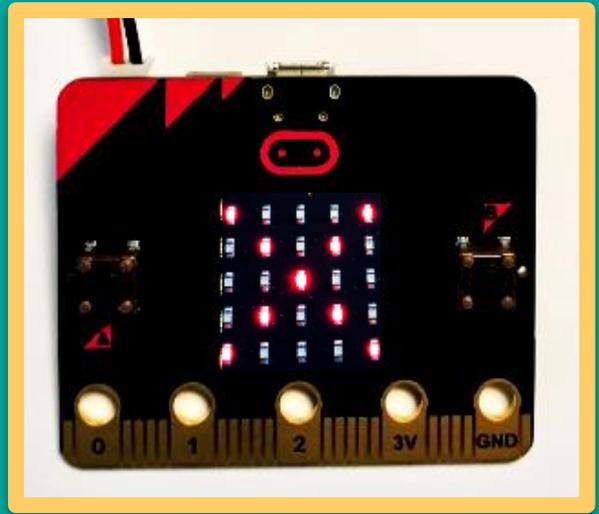
From 'General'

- From 'micro:bit' 'Actions'
- Plot the coordinates

program start

```
on micro:bit plot X: 0 Y: 0
on micro:bit plot X: 4 Y: 0
on micro:bit plot X: 1 Y: 1
on micro:bit plot X: 1 Y: 3
on micro:bit plot X: 2 Y: 2
on micro:bit plot X: 3 Y: 1
on micro:bit plot X: 3 Y: 3
on micro:bit plot X: 0 Y: 4
on micro:bit plot X: 4 Y: 4
```

=



Test your program: What was displayed?



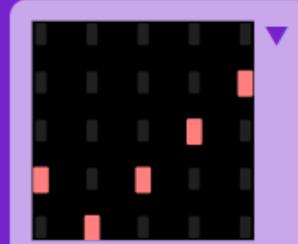


Can you help me check my Cyber Scanner is working correctly?

From
'micro:bit'
'Events'

when micro:bit **A** is pressed

on micro:bit display



clear micro:bit LEDs

From
'micro:bit'
'Actions'

First, remove eight 'on micro:bit plot' blocks.

```

on micro:bit plot X: 0 Y: 4
on micro:bit plot X: 1 Y: 1
on micro:bit plot X: 1 Y: 3
on micro:bit plot X: 2 Y: 2
on micro:bit plot X: 3 Y: 1
on micro:bit plot X: 3 Y: 3
on micro:bit plot X: 0 Y: 4
on micro:bit plot X: 4 Y: 4
  
```



Your workspace will then look like this:

```

when micro:bit A is pressed
  on micro:bit display
    clear micro:bit LEDs
  
```

```

program start
  on micro:bit plot X: 0 Y: 0
  
```

1

Create variable...

New variable name:

1
'X'

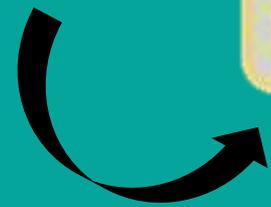
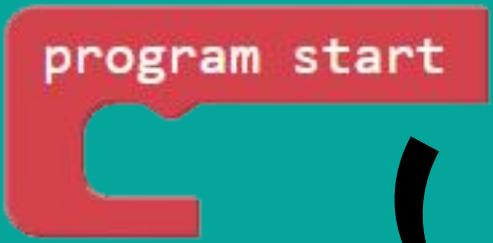
2
'Y'

These variables will be used to represent the X and Y coordinates on the micro: bit



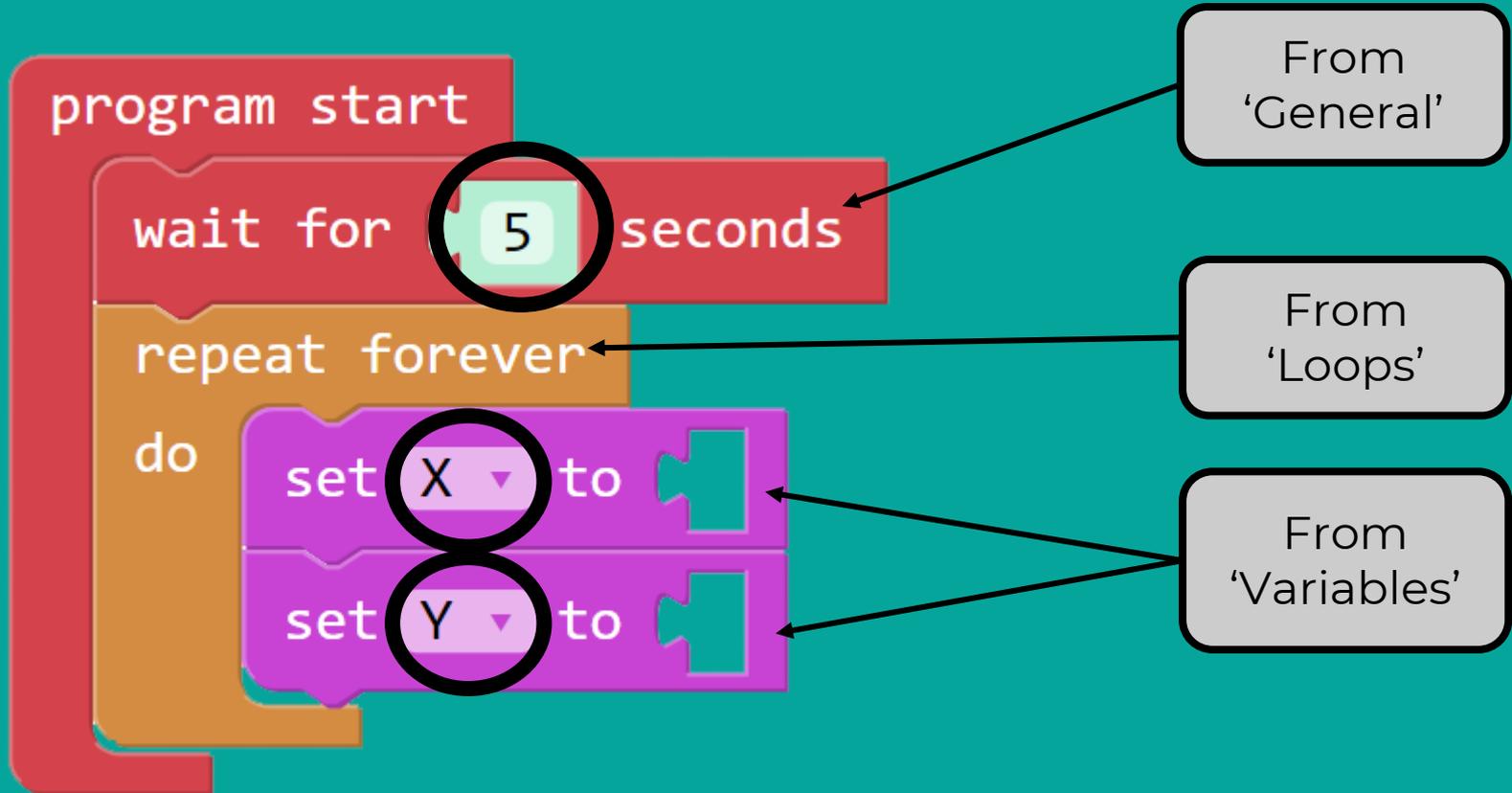
2

Leave this block on the workspace for later!



un-snap

3



4

```
program start
  wait for 5 seconds
  repeat forever
  do
    set X to prompt for text with message "X coordinate"
    set Y to prompt for text with message "Y coordinate"
```

From 'General'

5

```
program start
  wait for 5 seconds
  repeat forever
  do
    set X to prompt for text with message " X coordinate "
    set Y to prompt for text with message " Y coordinate "
    on micro:bit plot X: X Y: Y
```

From 'Variables'



Drag this block back from the workspace!

Challenge: Test your program

Here are the data sets to enter into your program:



```

when micro:bit A is pressed
  on micro:bit display
    clear micro:bit LEDs
  
```

Data Set 1	Data Set 2	Data Set 3
X: 0 Y: 4	X: 2 Y: 0	X: 3 Y: 0
X: 0 Y: 3	X: 2 Y: 1	X: 2 Y: 0
X: 0 Y: 2	X: 2 Y: 2	X: 1 Y: 0
X: 0 Y: 1	X: 1 Y: 3	X: 1 Y: 1
X: 1 Y: 1	X: 0 Y: 4	X: 1 Y: 2
X: 2 Y: 1	X: 3 Y: 3	X: 2 Y: 2
X: 3 Y: 1	X: 4 Y: 4	X: 3 Y: 2
X: 2 Y: 0		X: 3 Y: 3
X: 2 Y: 2		X: 3 Y: 4
		X: 2 Y: 4
		X: 1 Y: 4

```

program start
  wait for 5 seconds
  repeat forever
    do
      set X to prompt for text with message " X coordinate "
      set Y to prompt for text with message " Y coordinate "
      on micro:bit plot X: X Y: Y
    
```