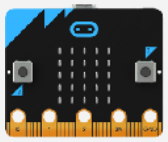
1

Click ‘ADD DEVICE’
Select device(s) from list

2

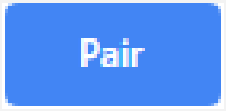


Connect the micro:bit battery

3

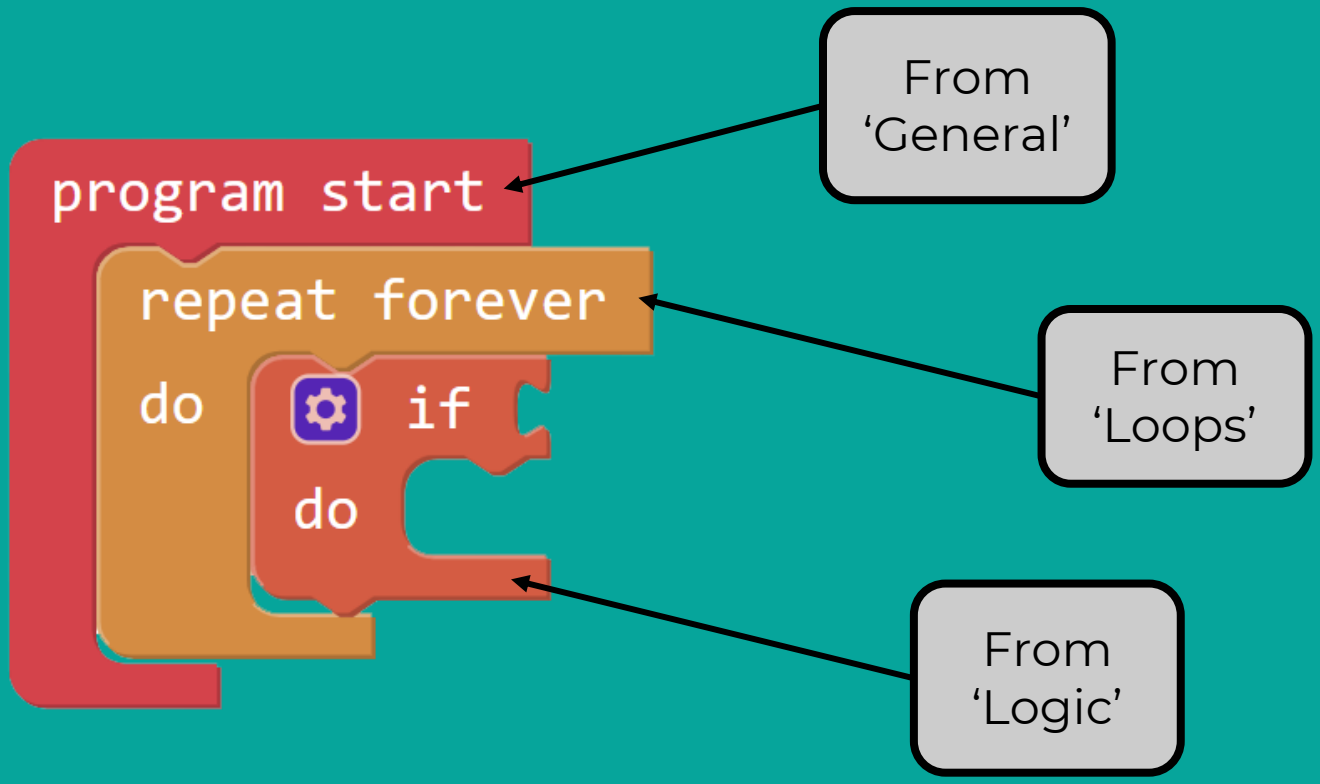
Click ‘CONNECT’

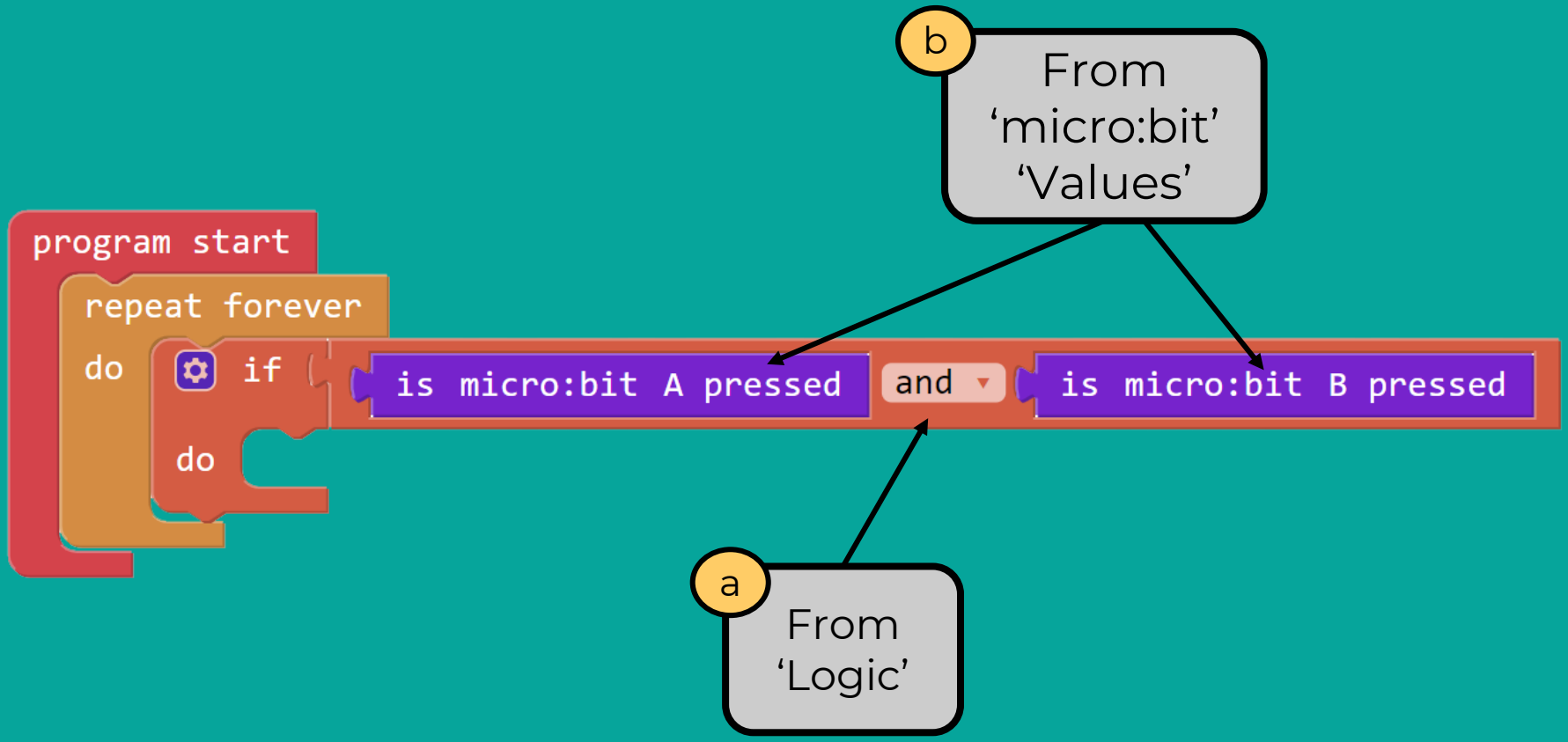
4

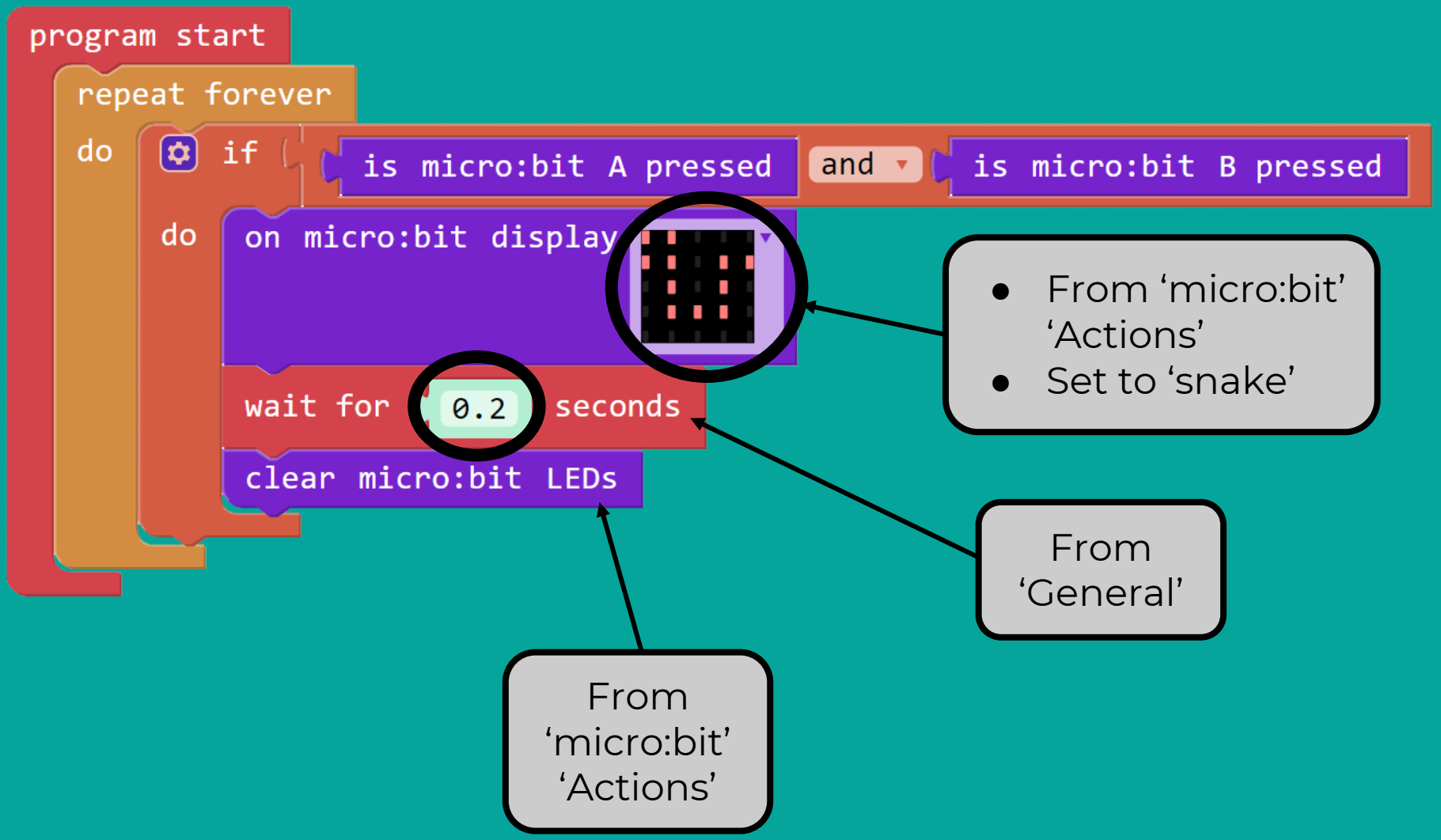


Select device from list
Click ‘Pair’

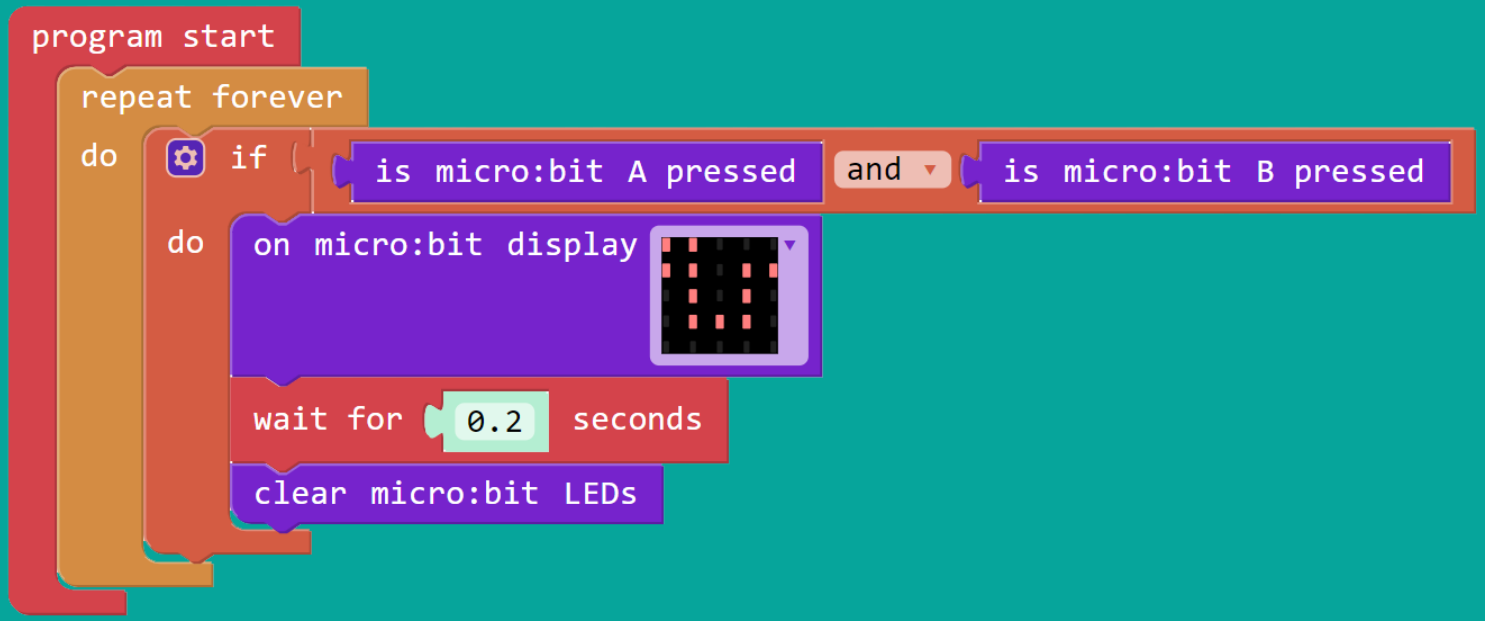
Code a program that demonstrates the use of the 'AND' logical operator




b
From 'micro:bit' 'Values'
program start
repeat forever
do
if
is micro:bit A pressed
and
is micro:bit B pressed
do
a
From 'Logic'


program start
repeat forever
do
if
is micro:bit A pressed
and
is micro:bit B pressed
do
on micro:bit display
wait for
0.2
seconds
clear micro:bit LEDs
From 'micro:bit' 'Actions'
Set to 'snake'
From 'General'
From 'micro:bit' 'Actions'

Let's Build



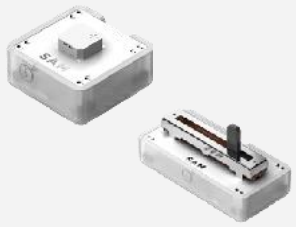
Look at this truth table for the AND logical operator within the program!

'A' Button	'B' Button	Output
True	True	True
True	False	False
False	True	False
False	False	False

1

Click ‘ADD DEVICE’
Select device(s) from list

2



Turn on the Slider and the Buzzer

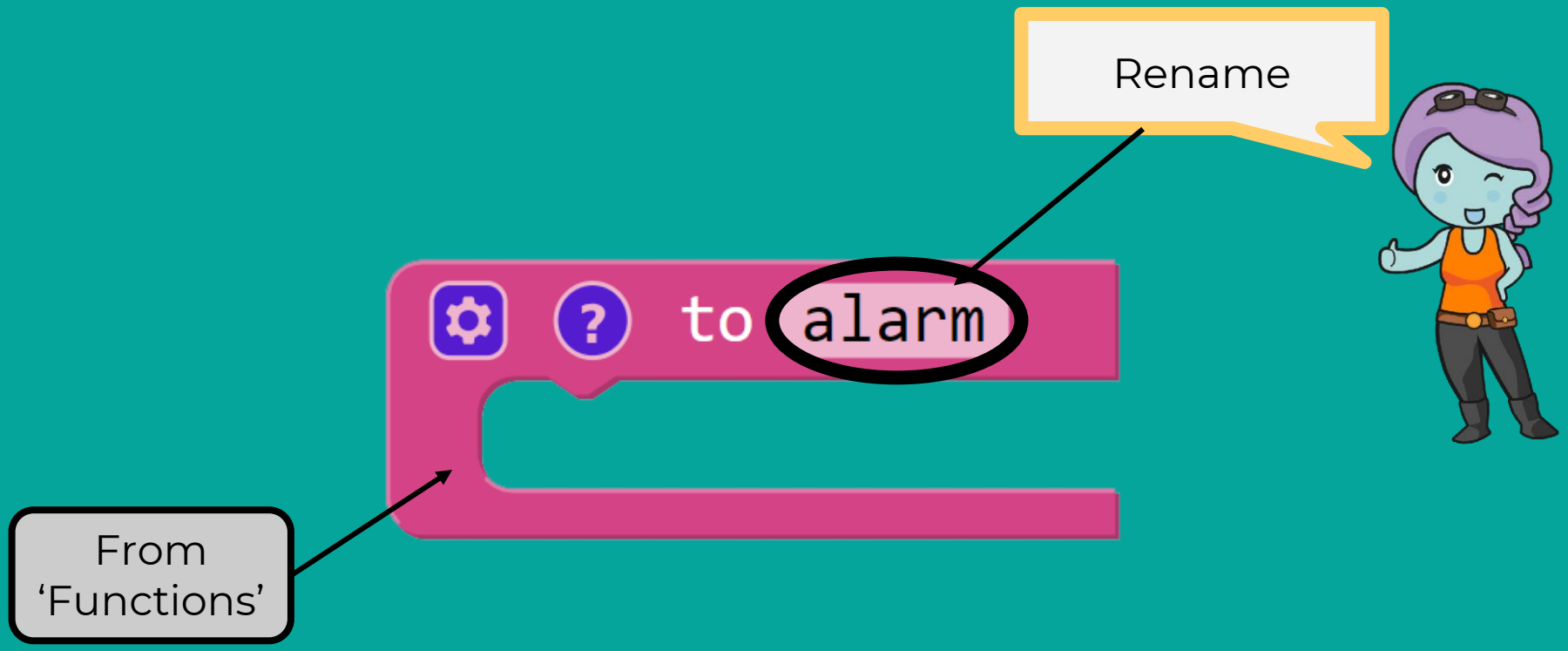
3

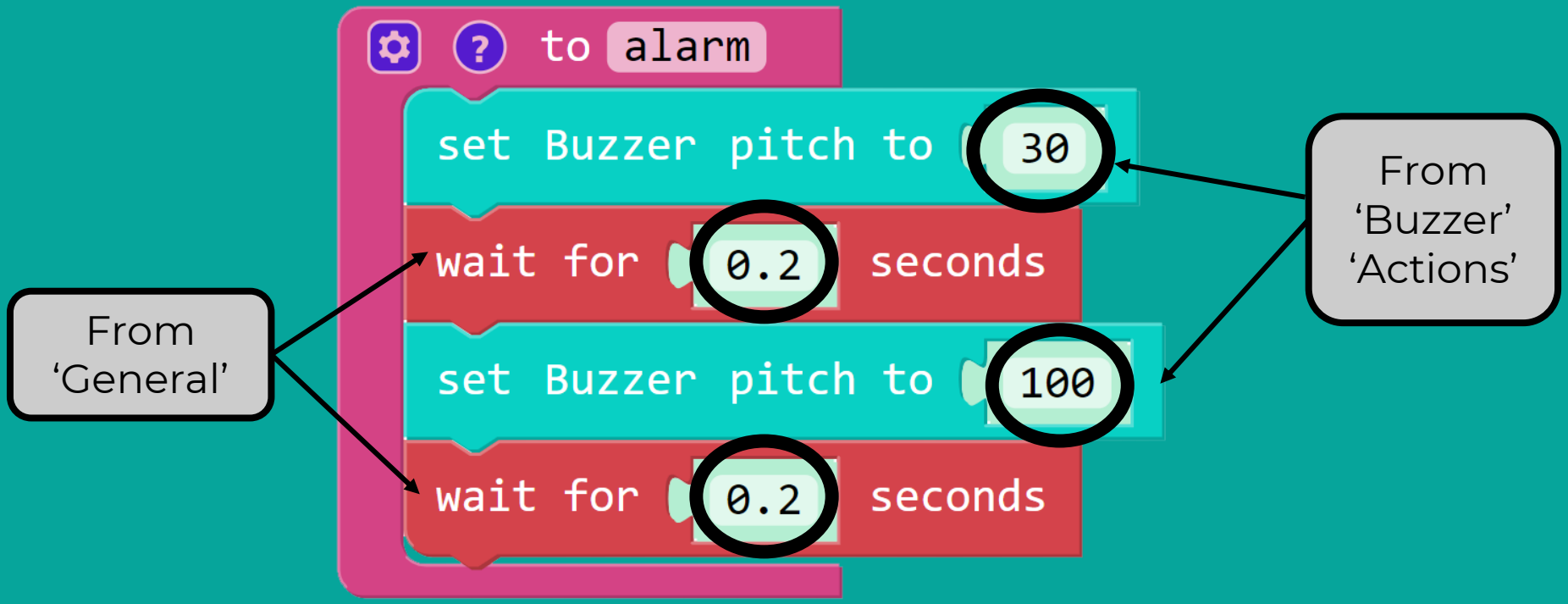
Click ‘CONNECT’

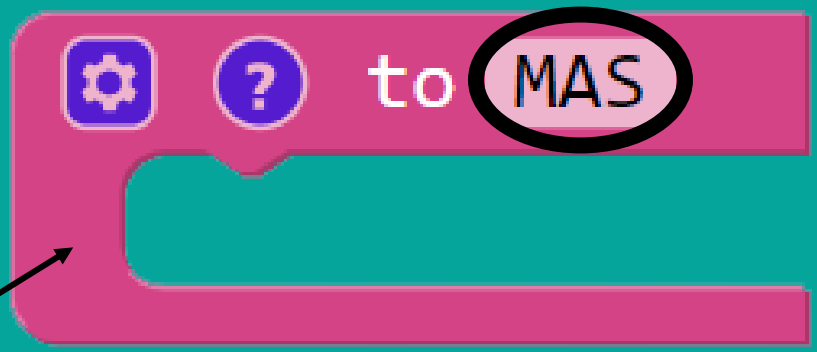
4

Select device(s) from list
Click ‘Pair’

Code a program that uses either or both of the micro:bit buttons on the micro:bit to set off an alert

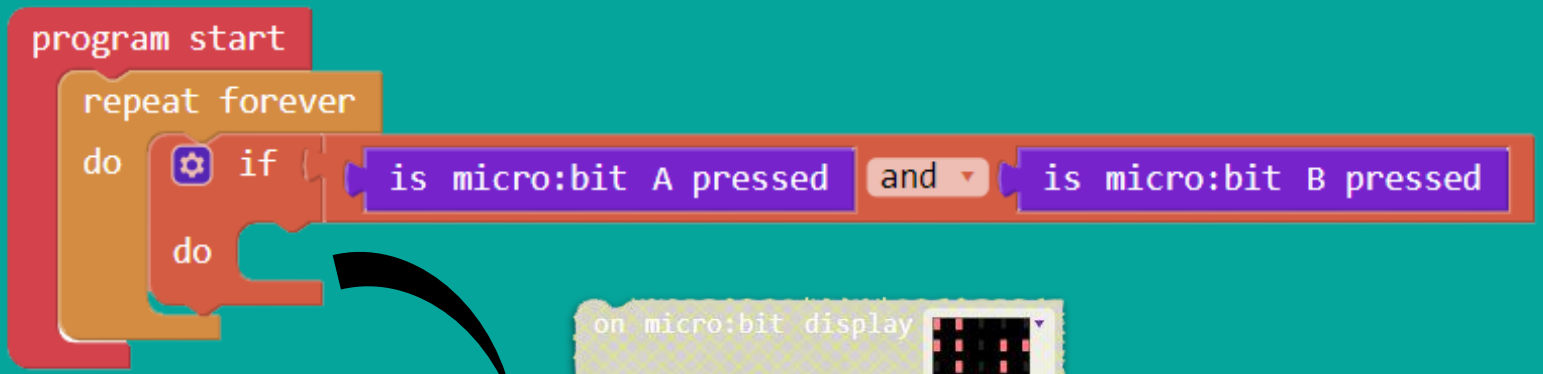


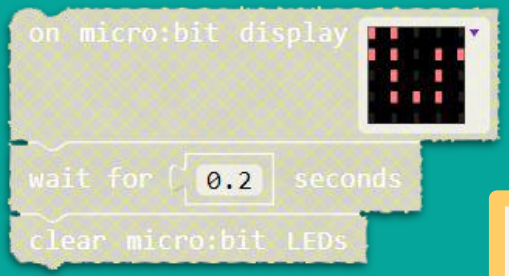

to alarm
set Buzzer pitch to 30
wait for 0.2 seconds
set Buzzer pitch to 100
wait for 0.2 seconds
From 'General'
From 'Buzzer' 'Actions'

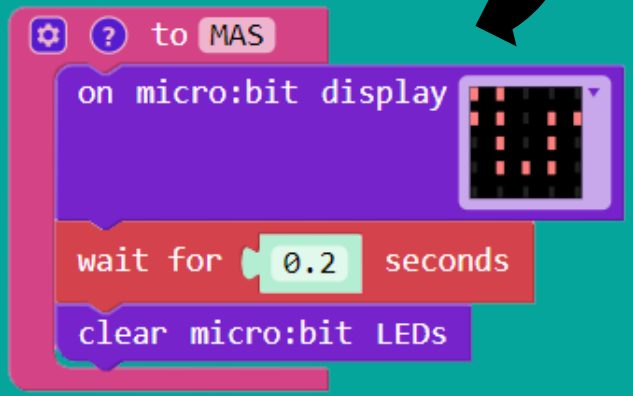


From
‘Functions’

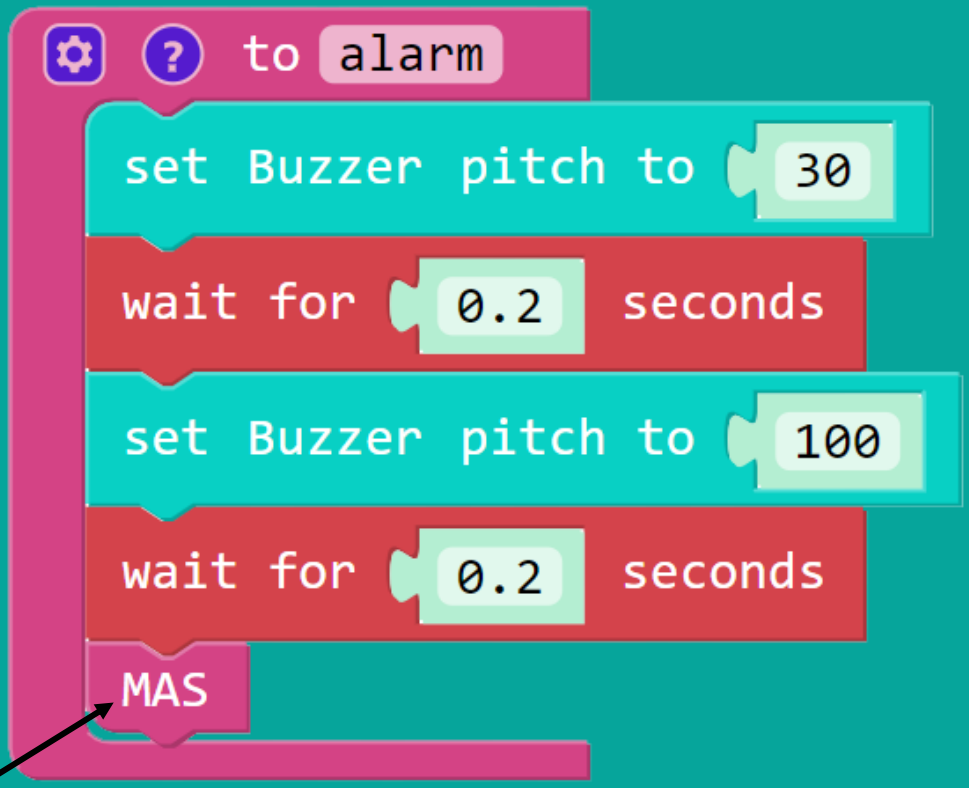
Challenge



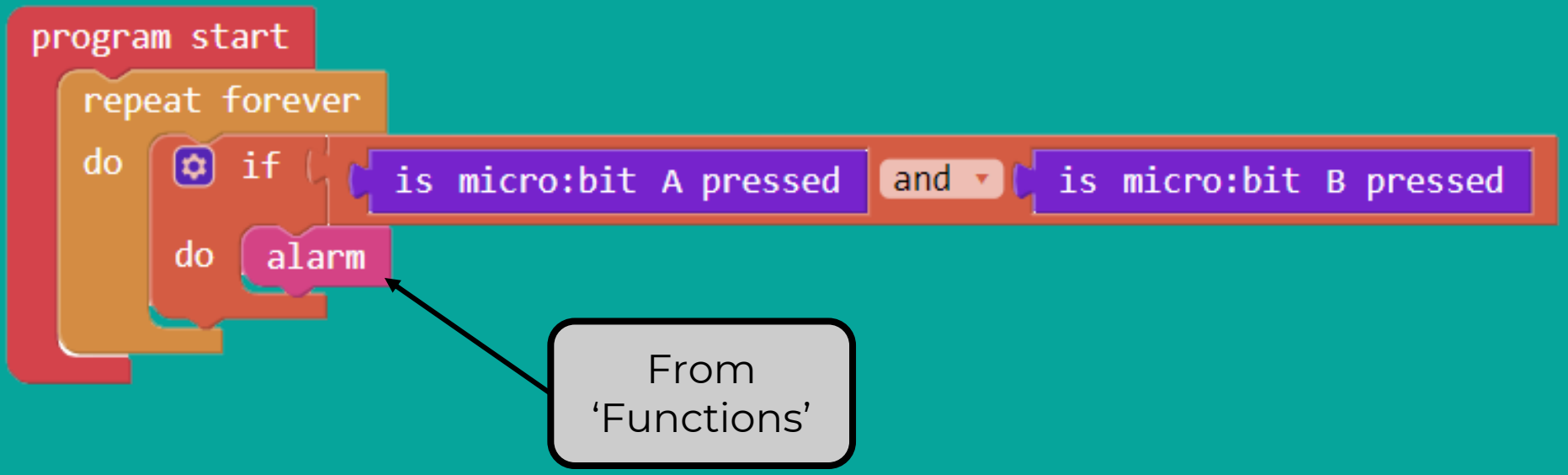




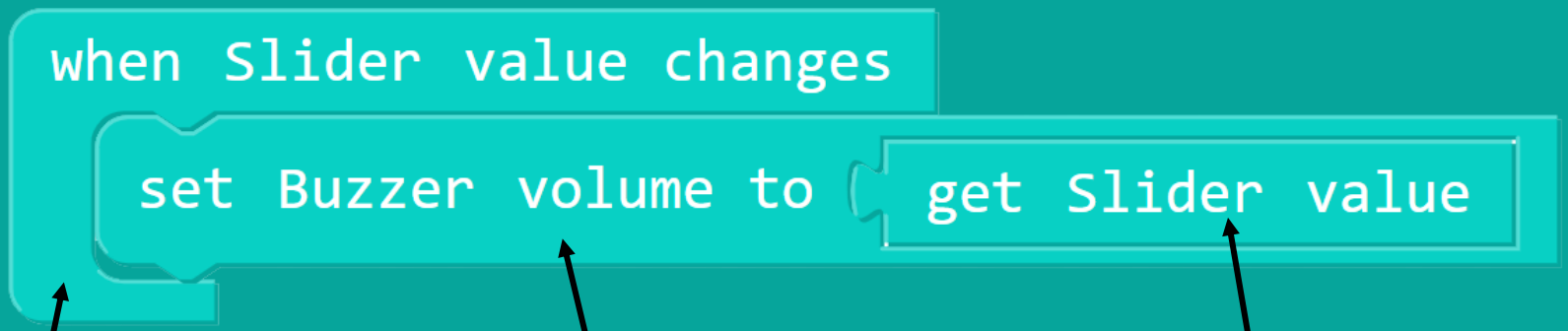
Transfer these blocks from the 'if do' into the 'MAS' function



From ‘Functions’



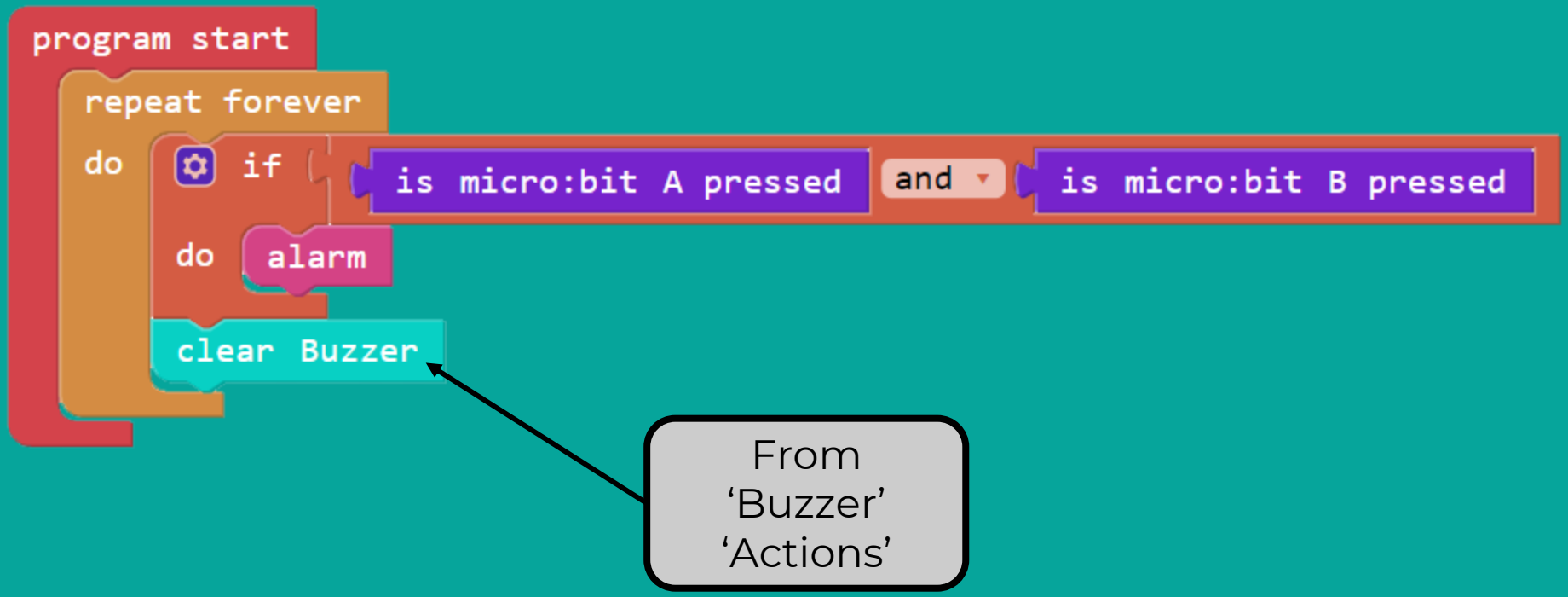
Once a function is created, new blocks named the same are added to the 'Functions' tab.



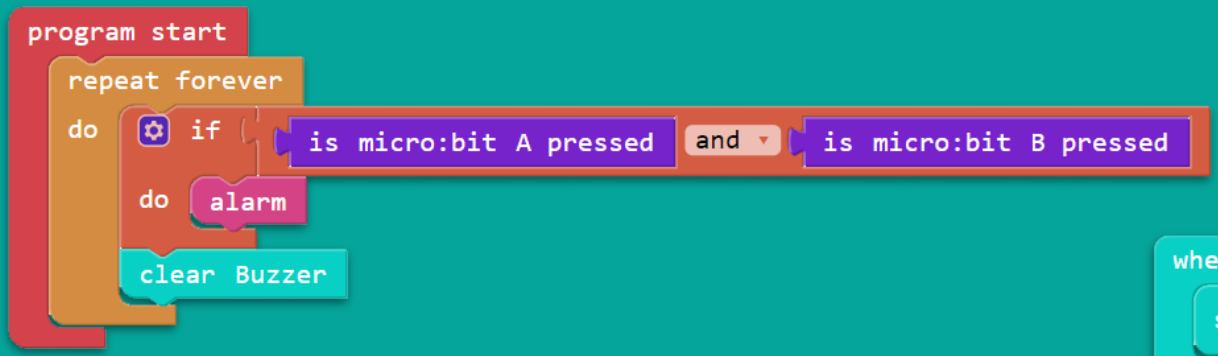
From ‘Slider’ ‘Events’

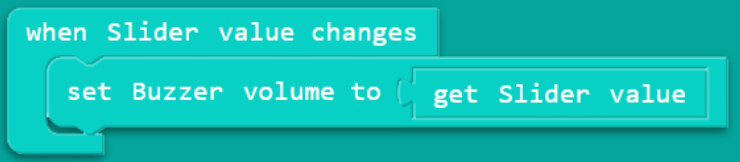
From ‘Buzzer’ ‘Actions’

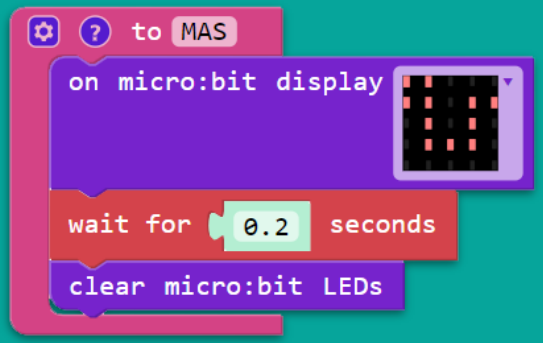
From ‘Slider’ ‘Values’

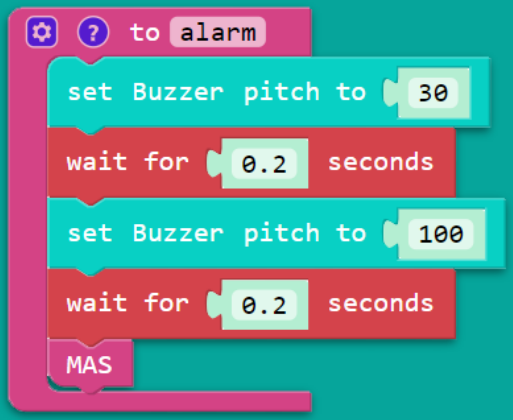

program start
repeat forever
do
if
is micro:bit A pressed
and
is micro:bit B pressed
do
alarm
clear Buzzer
From
'Buzzer'
'Actions'

Challenge: Test your program









Challenge: Test your program

When both ‘A’ and ‘B’ buttons are pressed, the program will call upon the ‘alarm’ function which calls upon the ‘MAS’ function.

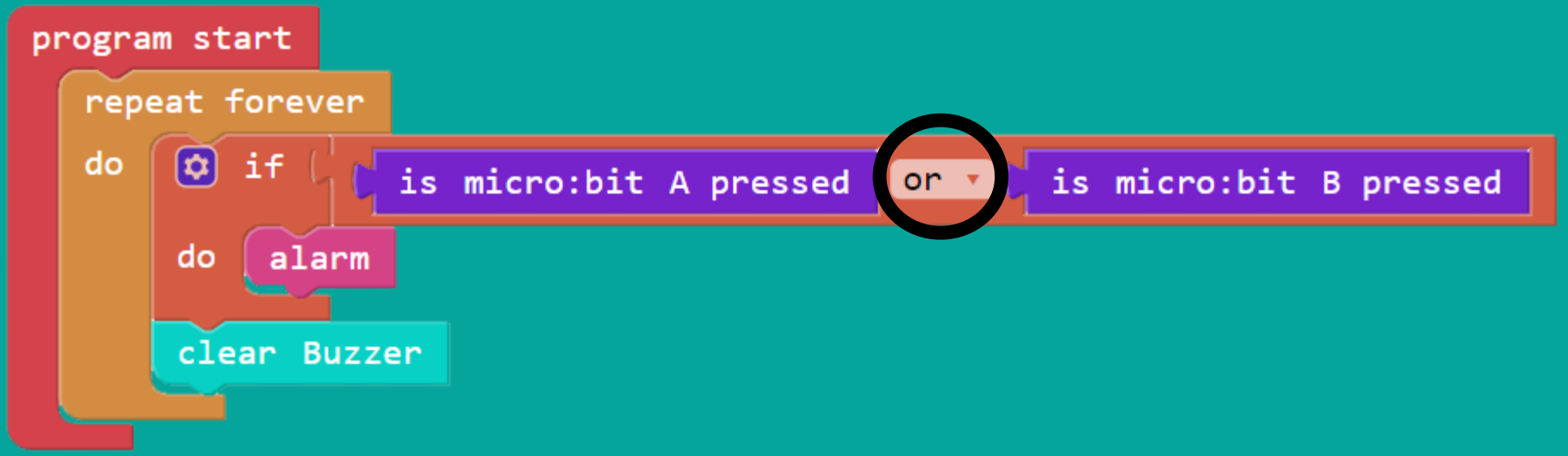
```
program start
repeat forever
do  if  is micro:bit A pressed  and  is micro:bit B pressed
    do  alarm
    clear Buzzer
```

```
when Slider value changes
    set Buzzer volume to  get Slider value
```

```
to MAS
on micro:bit display
wait for  0.2  seconds
clear micro:bit LEDs
```

```
to alarm
set Buzzer pitch to  30
wait for  0.2  seconds
set Buzzer pitch to  100
wait for  0.2  seconds
MAS
```

Debug



Look at this truth table for the OR logical operator within the program!

A Button	B Button	Output
True	True	True
True	False	True
False	True	True
False	False	False