

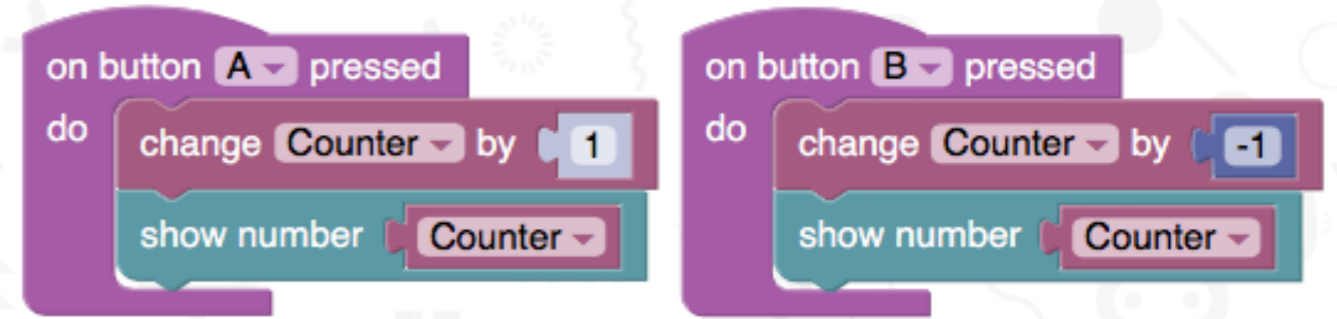
# micro:bit IF Statement

Using this code we are looking at how we can use **IF** statements to make the micro:bit count up and down using the A & B buttons. We use the IF Statement and the A/B buttons together to create a display to confirm IF the number counted is a Minus, Positive or Zero number.

How could you use a sensor (input) to trigger the micro:bit instead of the integrated A/B buttons?

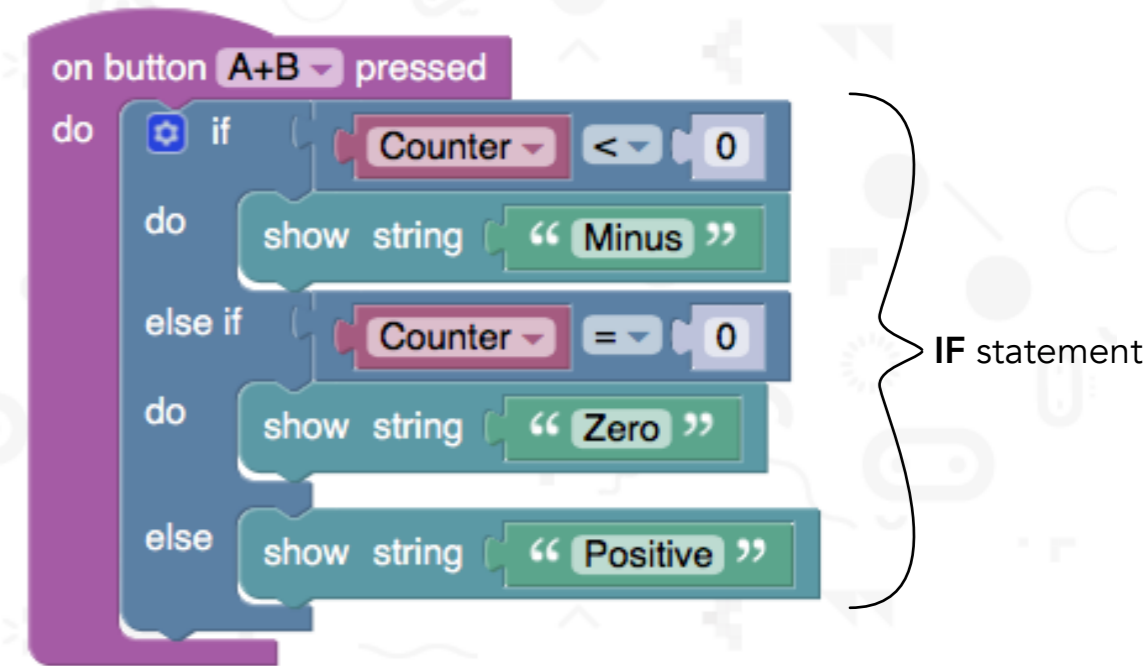
Why would you need to count something up and down and how could you use this in a real world situation?

To create the if, do, else if, do, else command we need to change the if block. To do this click on the gear icon and drag the **else if** & **else** command into the if block as shown



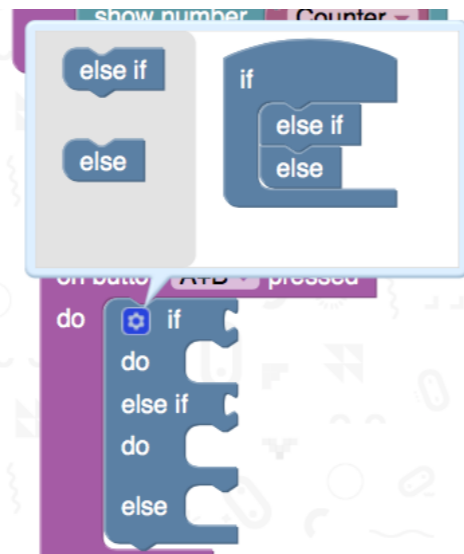
```
on button A pressed
do
  change Counter by 1
  show number Counter

on button B pressed
do
  change Counter by -1
  show number Counter
```

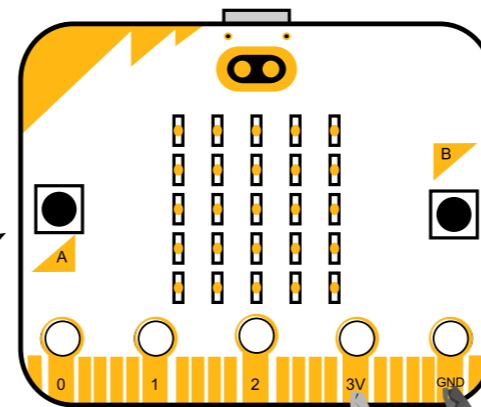


```
on button A+B pressed
do
  if Counter < 0
  do
    show string "Minus"
  else if Counter = 0
  do
    show string "Zero"
  else
    show string "Positive"
```

IF statement

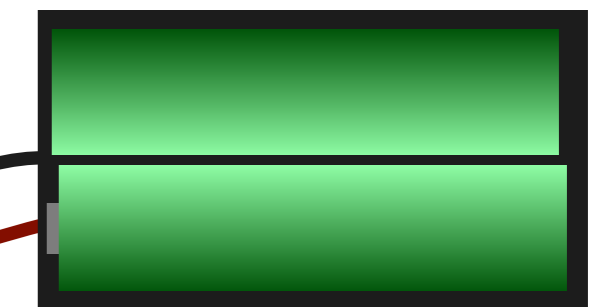


Click on the A button to **increase** the number displayed on the LED matrix



Click on the B button to **decrease** the number displayed on the LED matrix

Press both A & B at the same time to re-set the counter back to zero and to display if the number shown was a positive or negative number



Remember you need to use a maximum of 3V to run the micro:bit