



Microbit Elective 1

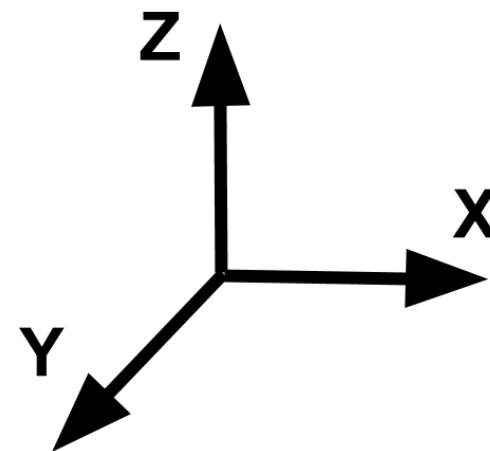


LEAVING CERTIFICATE
COMPUTER SCIENCE

BRANCHING OUT

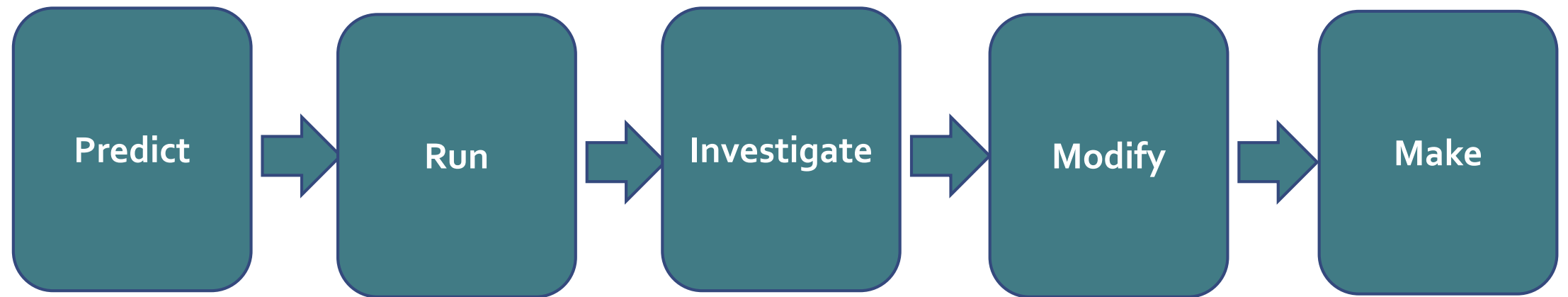
Micro:bit Workshop - Session 2

Sensors

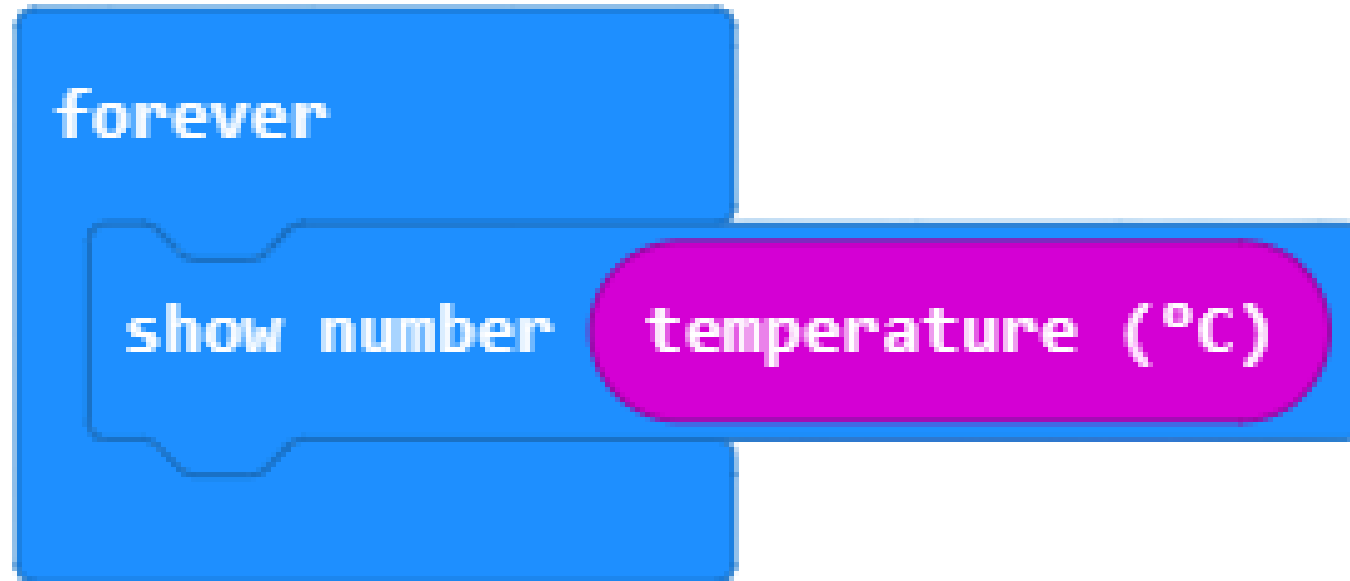


Today

PRIMM



Exercise 1 – step 1



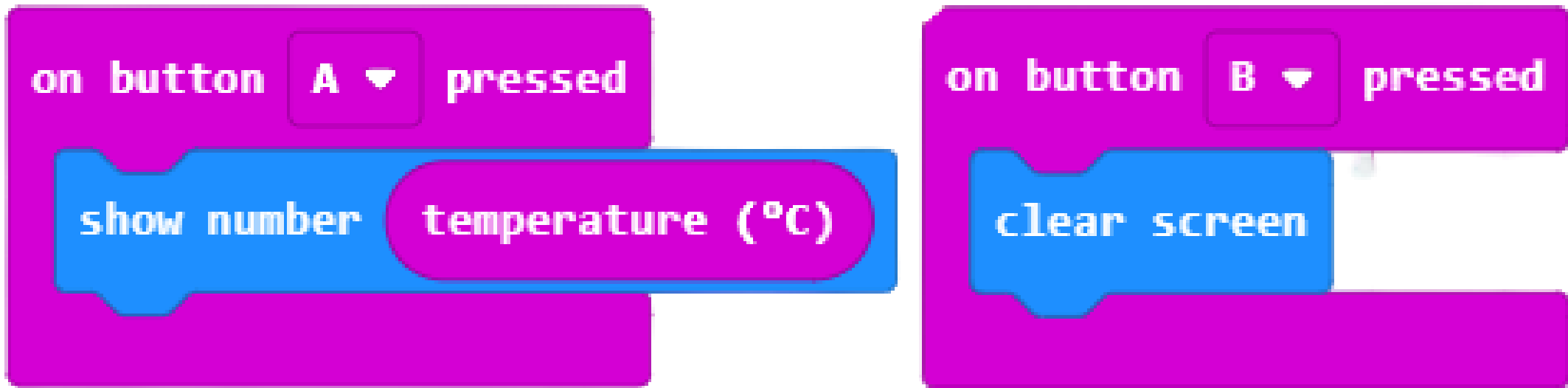
Exercise 1 – step 2

Adapt your code so that

- temperature is only displayed when **Button A** is clicked
- the LED display area is cleared when **Button B** is clicked



Exercise 1 – sample solution



Stretch break



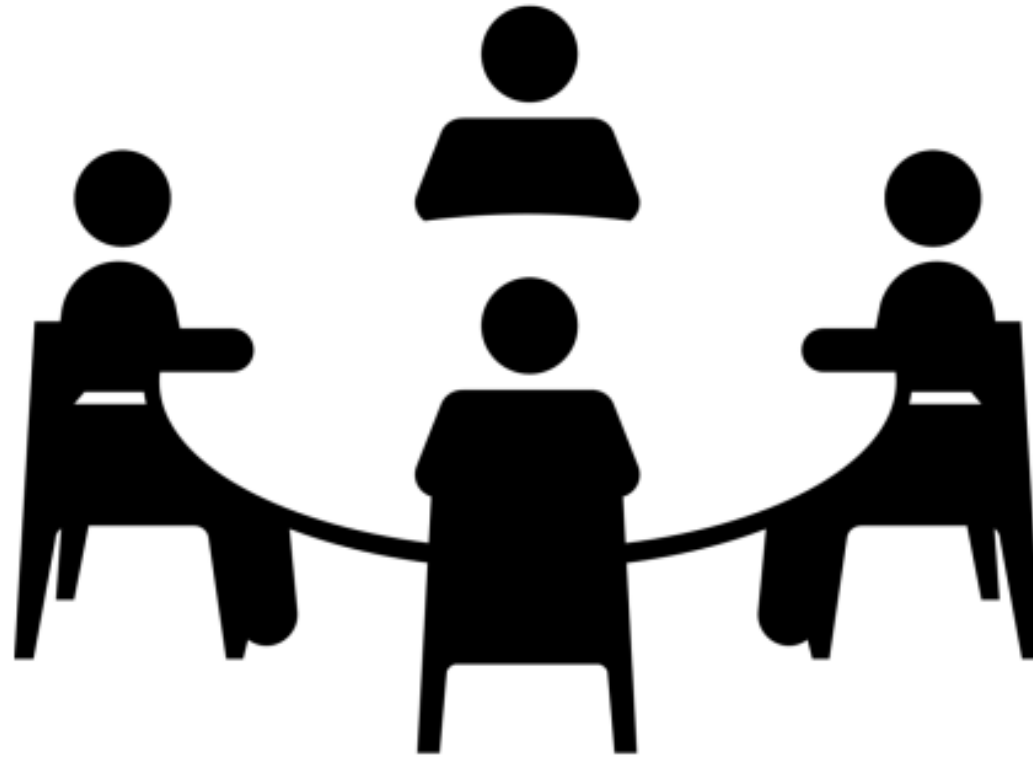
Exercise 2 – step 1



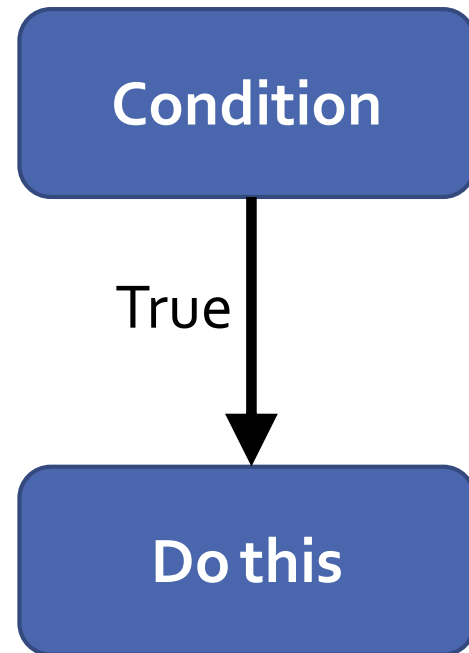
```
on button A pressed
  change temp by temperature (°C)
  change count by 1
```

```
on button B pressed
  show number temp ÷ count
```

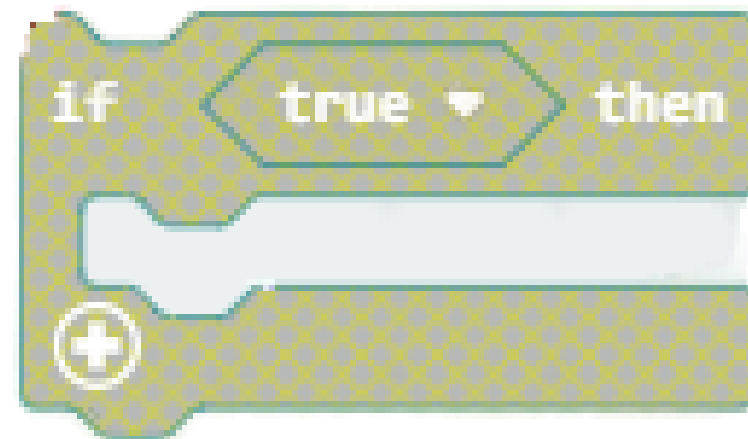
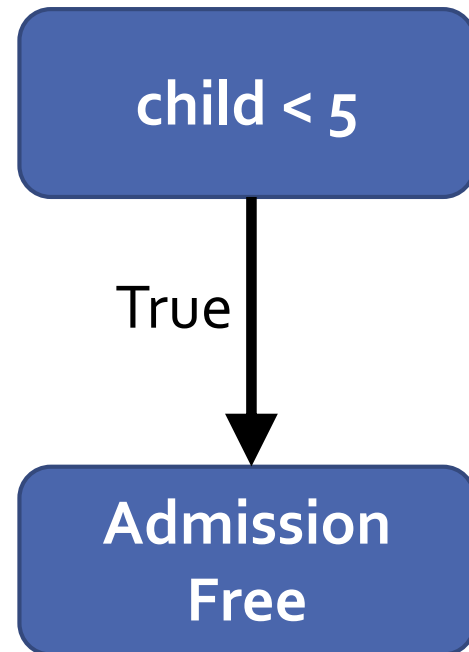
Breakout



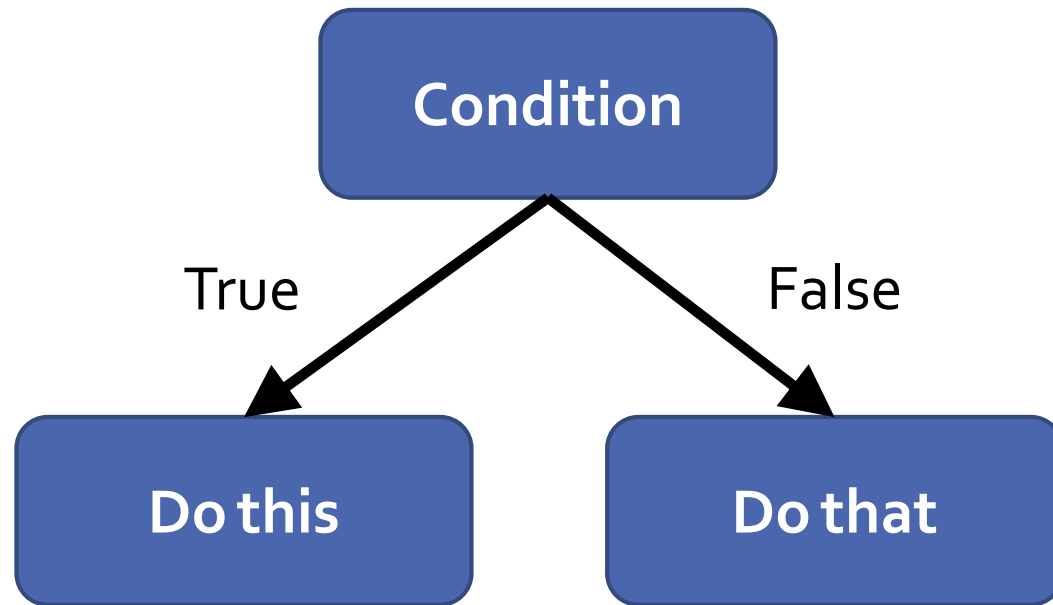
Conditional statements



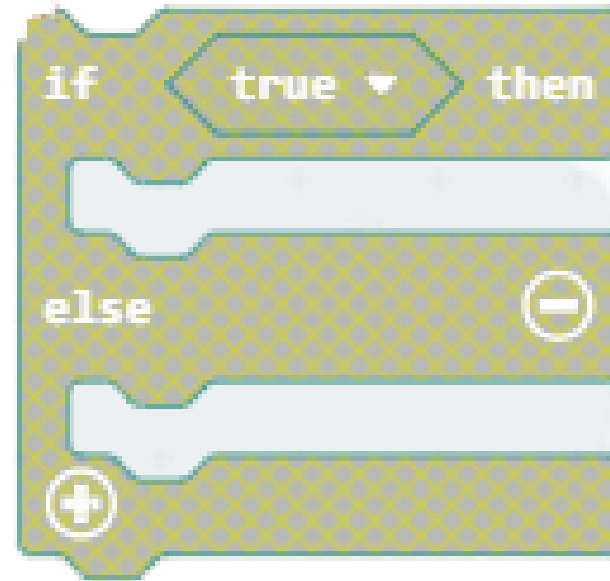
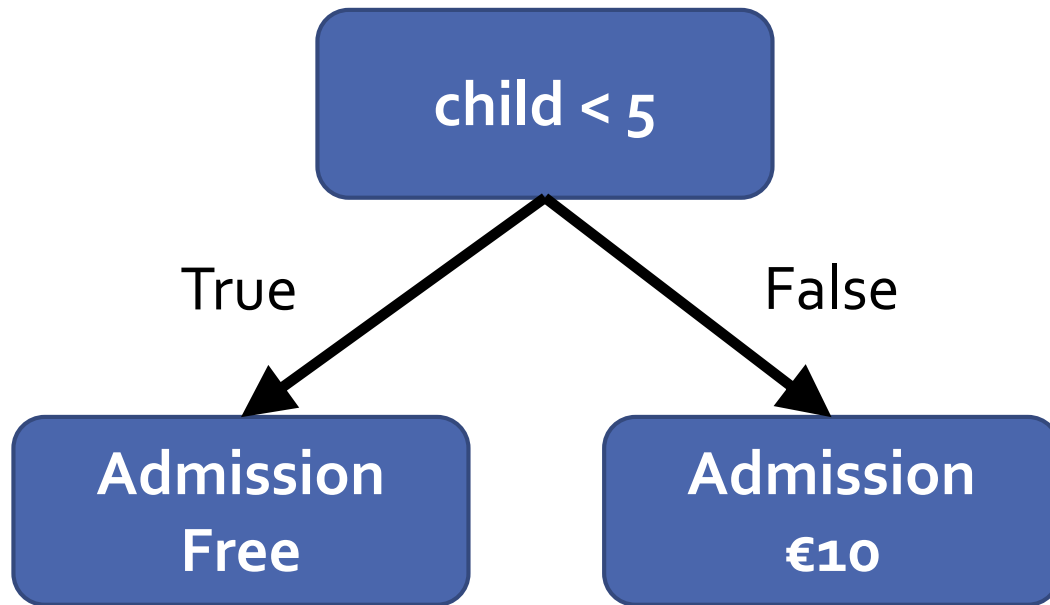
Conditional statements



Conditional statements



Conditional statements



Exercise 2 – step 2

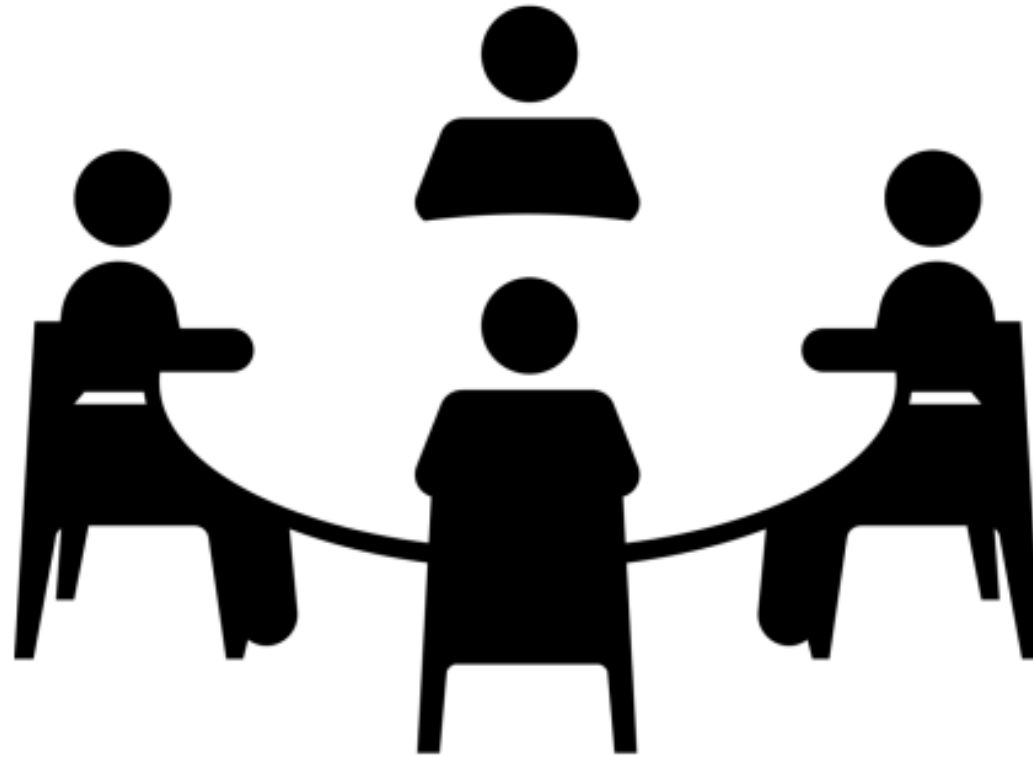


If the temperature is above a certain value

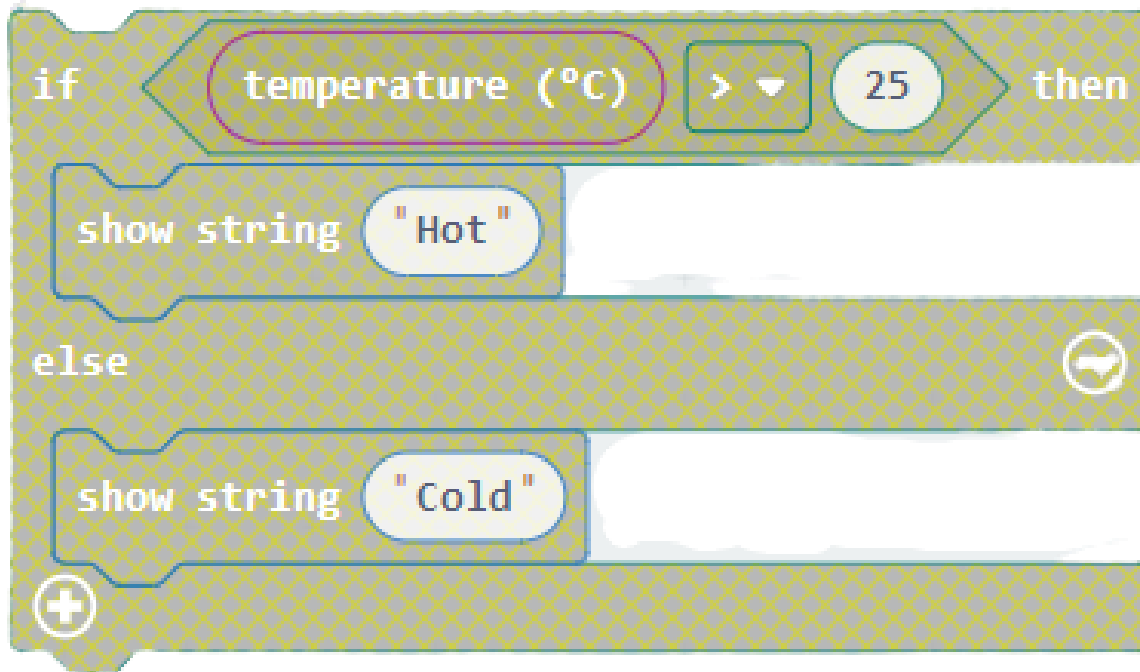
- micro:bit should indicate that the room is hot
- otherwise it should indicate that the room is cold



Breakout

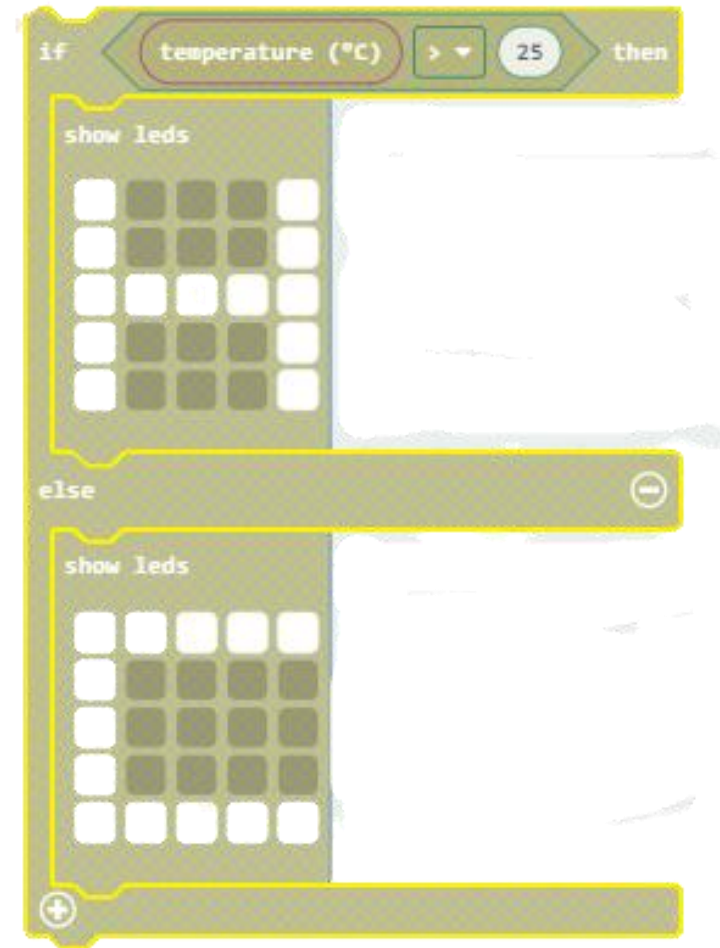


Exercise #2 – sample solution snippets



```
if temperature (°C) > 25 then
  show string "Hot"
else
  show string "Cold"
```

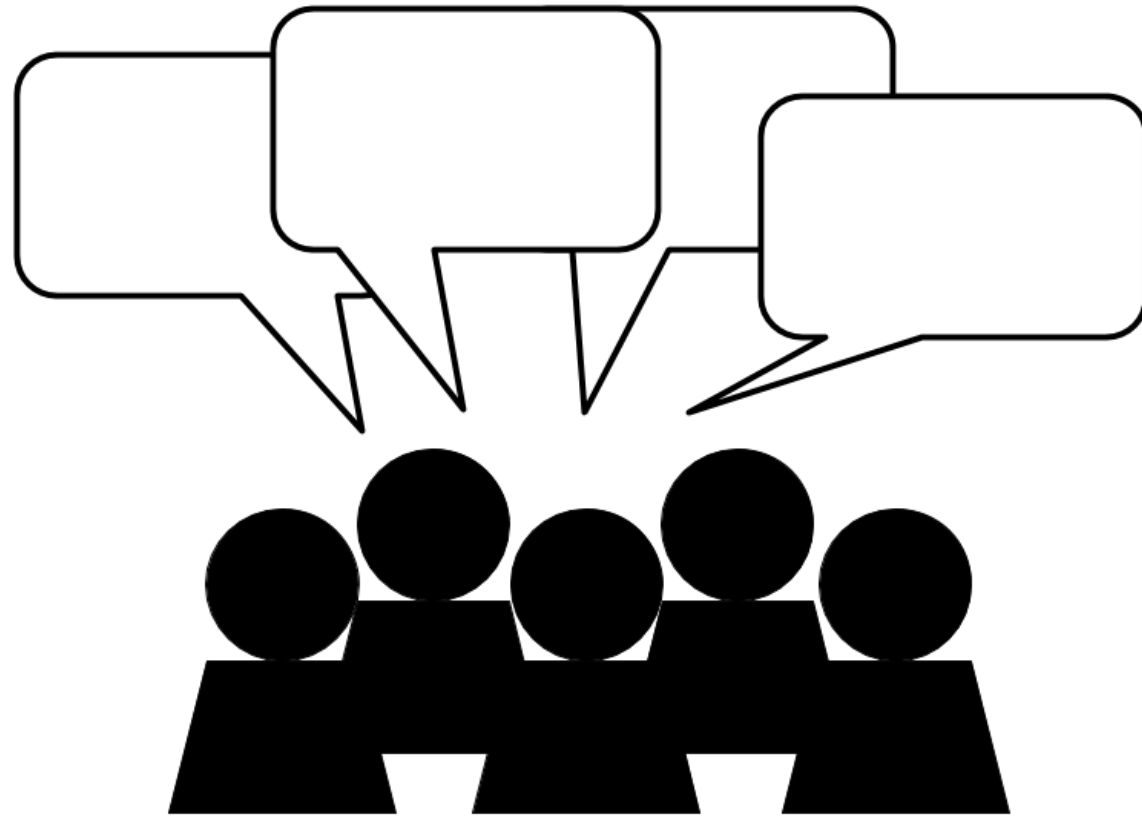
A Scratch code snippet with a green checkered background. It starts with an 'if' block containing a 'temperature (°C)' block, a '>' operator, and a '25' block, followed by a 'then' block. Inside the 'then' block is a 'show string' block with the text '"Hot"'. Below the 'then' block is an 'else' block with a 'show string' block containing '"Cold"'. A plus sign icon is visible at the bottom left of the code block.



```
if temperature (°C) > 25 then
  show leds
else
  show leds
```

A Scratch code snippet with a yellow checkered background. It starts with an 'if' block containing a 'temperature (°C)' block, a '>' operator, and a '25' block, followed by a 'then' block. Inside the 'then' block is a 'show leds' block with a 5x5 grid of 25 LED indicators. Below the 'then' block is an 'else' block with another 'show leds' block and a 5x5 grid of 25 LED indicators. Plus and minus sign icons are visible at the bottom left and right of the code block, respectively.

Feedback



Next Up

