Code on Microbit.

## **Complex conditionals**

## **Multiple conditions**

Sometimes there is code you want to run if two or more conditions are true. The if then block lets you combine conditions with the and the or blocks. For example, if we want to see if a random number is between 0 and 9, we can put two conditions in an if then and connect them with an and.

Α

```
on start

set rando ▼ to pick random -20 to 20

if rando ▼ ≥ ▼ 0 and ▼ rando ▼ < ▼ 10 then

show number rando ▼

①
```

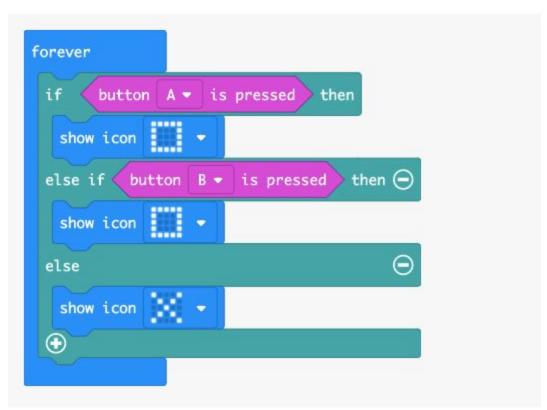
This is how to check if a result is within a range of values, in this case it's from 0 to 9. What if we want to include the values between 15 and 18 too? We just add another range check and connect them with and .

B.

Use Complex coding commands such as IF then Else Code a program so that it performs the following on the display screen:

- 1. If Button A is pressed then displays a Smiley face
- 2. If Button B is pressed Displays a Full light up screen
- 3. And if A and B pressed then a Cross.
- 4. For ever.

## Example:



Now change the code to perform a times table for any number between 1 to 12.

If Button A is pressed to show any random number between 1 to 12 and Button B is pressed any random number between 1-12. Display Product = Ax B