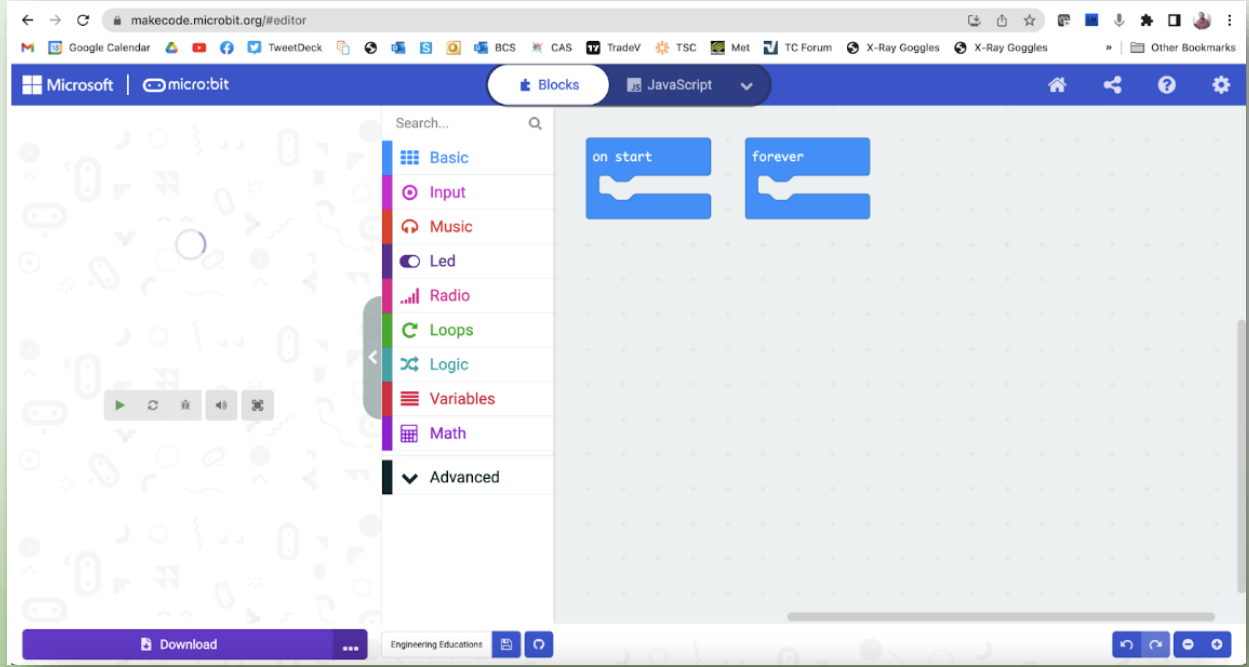
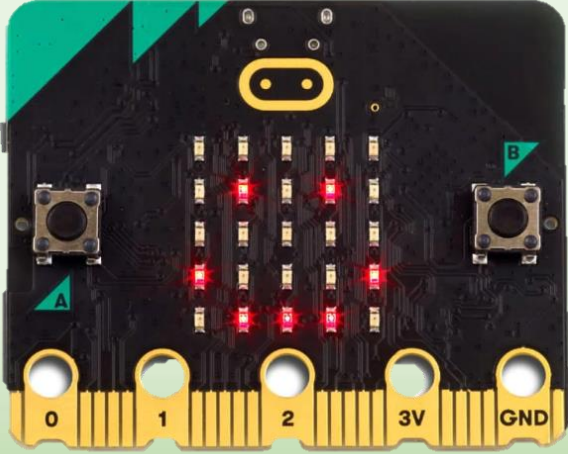




SESSION 5

How can we use technology to monitor the wellbeing of dairy cows?







How can we tell if cows are sleeping better on the new bedding?



Microsoft | micro:bit

Blocks JavaScript

Search...

Variables

Make a Variable...

1. Select the variables menu

2. Click 'Make a Variable'

New variable name:

Movement

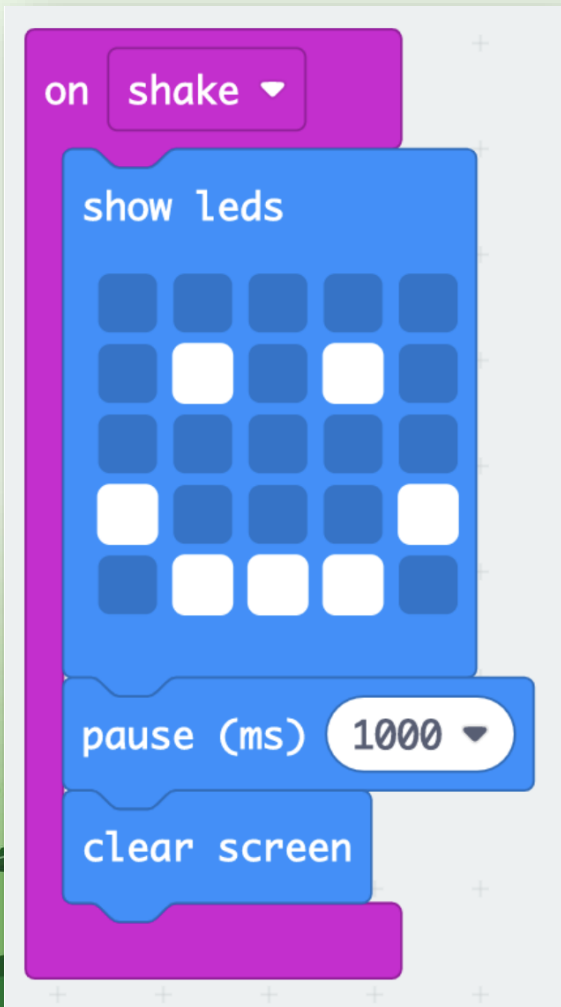
Ok

3. Name the variable 'Movement' and click okay.

Download Cow Fit Bit



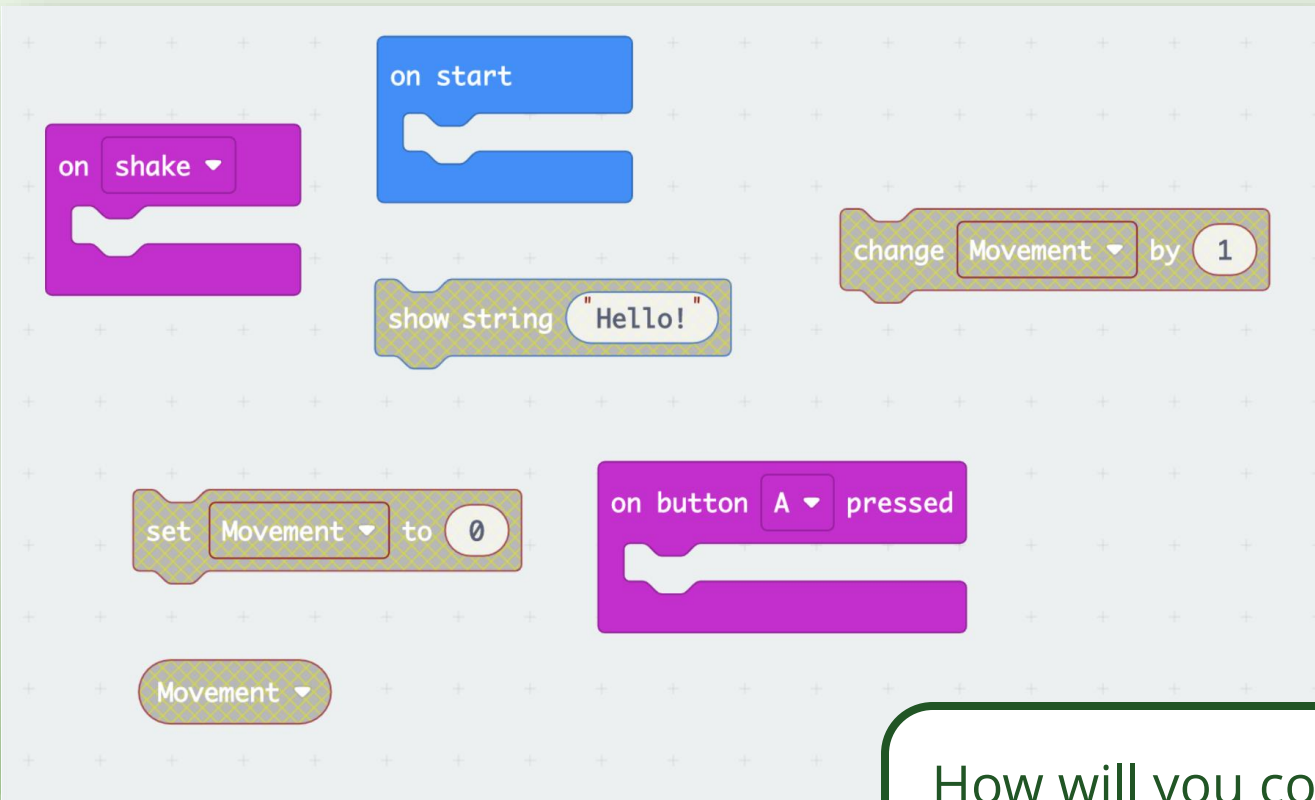
```
on shake ▼  
  show leds  
    [ 5x5 grid of LEDs with some lit ]  
  pause (ms) 1000 ▼  
  clear screen
```



What happens when you shake the Micro:bit?

How will this help to monitor cow activity?





How will you combine these bits of code to sense and keep track of cow movements?



Solution

```
on start
  set Movement to 0
```

Ensures when the program is run, the value in the movement variable is reset to 0.

```
on shake
  change Movement by 1
```

When the cow moves and the micro:bit is shaken, the value of 'Movement' increases by 1. This keeps track of the number of times the cow has moved.

```
on button A pressed
  show string Movement
```

Clicking the button A will display the number stored in the 'Movement' variable i.e. how many times the cow has moved.

on shake ▾



shake



logo up



logo down



screen up



screen down



tilt left



tilt right



free fall



3g



6g



8g

Super challenge

Is there a more effective way to sense and keep track of a cow's movement?

