Computing

Lesson 3: Controlling with Conditions

Selection In Physical Computing

Andy Bush



Task 1 - Using conditions

Samir is trying to write a condition and an action to carry out if the condition is true using the following:

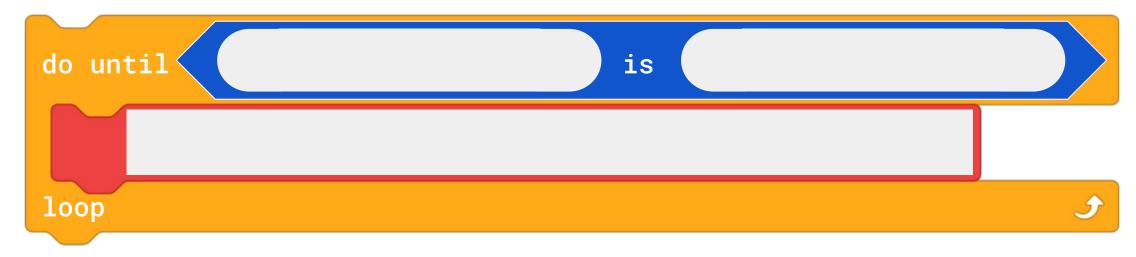
Question: What is your favourite flavour of ice-cream?

Action: Do a nod.

Can Samir's question be used for a condition?
Can you suggest a question that could be used?



Task 2 - Do until



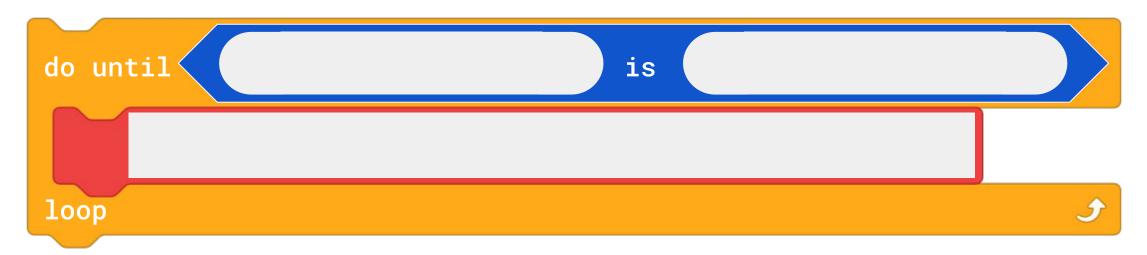
What is the condition?

What action will be repeated while the condition is false?

What condition needs to be true for the repeated action to stop?



Task 2 - Do until



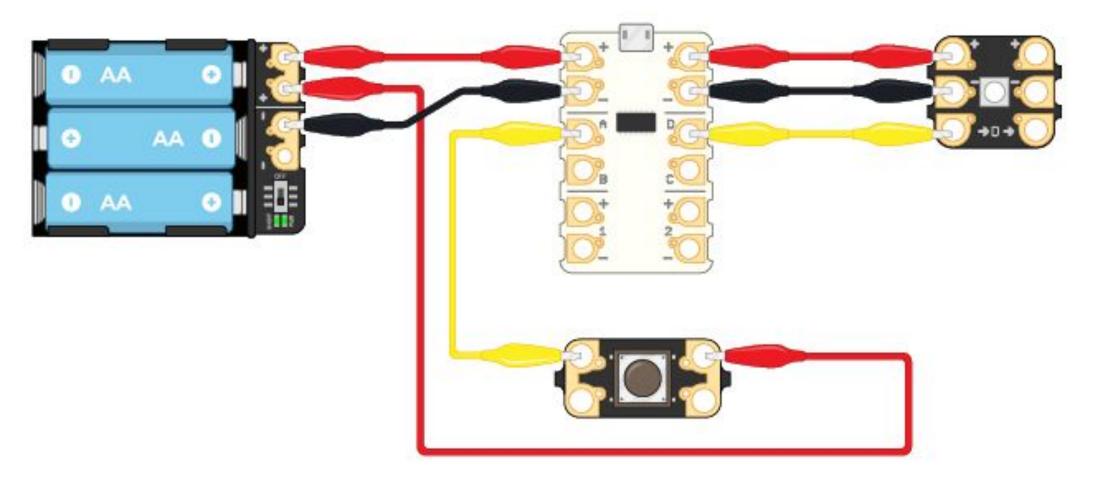
Use the scenarios to decide how to complete the 'do until' code blocks as if they were programs that we could run.

- 1. I am allowed to read until 9pm.
- 2. I can play until the bell rings.
- 3. We have to go home when it gets dark.
- 4. At pedestrian crossings, the light stays green for traffic until someone wants to cross the road.



Task 3 - Connect an input

Connect a push switch and sparkle to your Crumble.





Task 4 - Using inputs

Write a program that uses a condition to stop a repeating light pattern.

Your light pattern should use one sparkle and can have up to five colours.

The condition must be the push switch being pressed.



Source: Crumble software



Resume the video now



