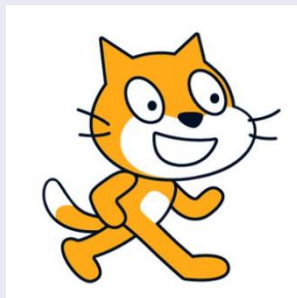


Lesson 2: Selecting outcomes

Year 5 – Programming – Selection in quizzes

Load up Scratch in your browser
(Click on the cat)



LOOK ON EVERY SLIDE



If you see this sign it means record what happened in sentences in your book



If you see this sign it means you need to do some coding in Scratch

Lesson 2: Selecting different outcomes

To relate that a conditional statement connects a condition to an outcome

- I can use selection in an infinite loop to check a condition
- I can identify the condition and outcomes in an 'if... then... else...' statement
- I can create a program with different outcomes using selection

Recalling repetition

Dance 1

Forever

Clap

Touch the floor

Dance 2

Repeat 2 times

Step Forward

Spin around

Touch the ground

Dance 1 has fewer instructions so it will be finished before dance 2.

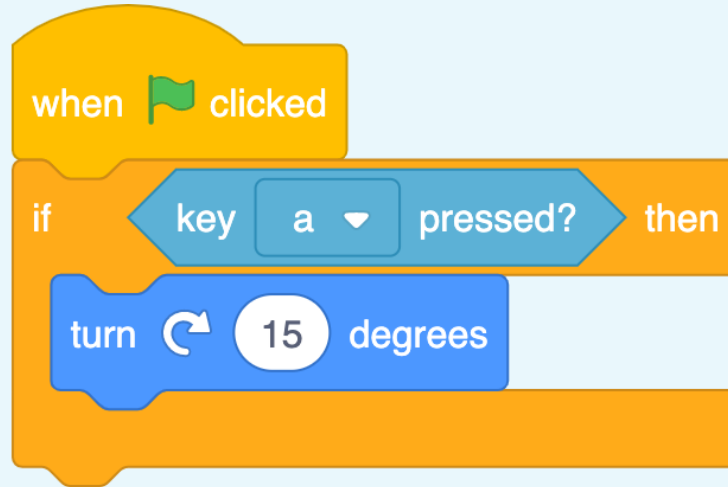
Do you agree with this statement?



Explain your answer

Using repetition with selection

Try this code. What happens?



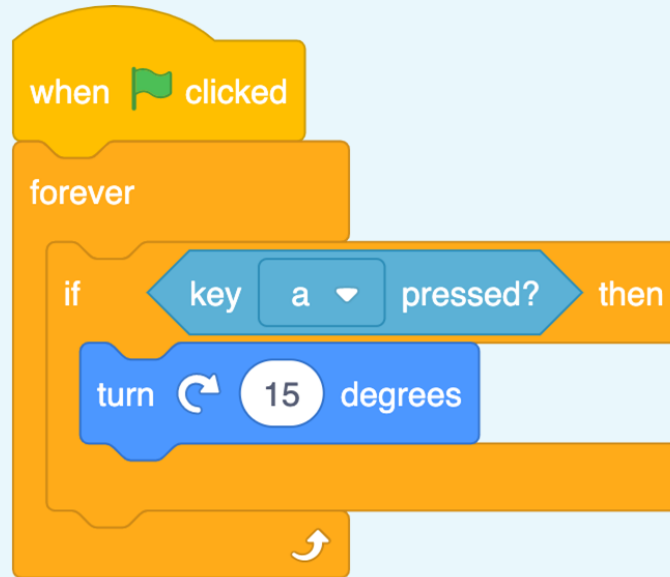
Type the code
Record what happens

How might a **forever** loop help?



Explain your answer

Using repetition with selection



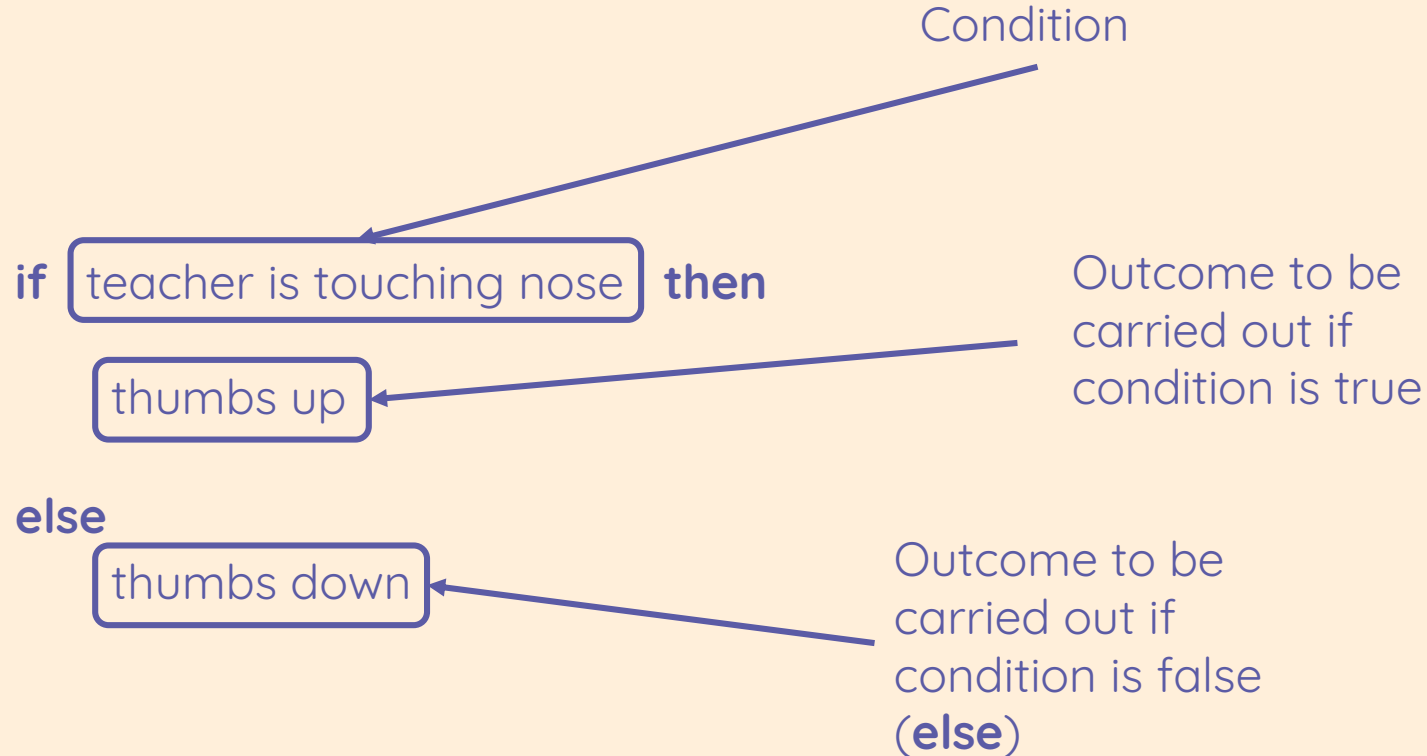
Type the code
Record what happens

How did using a **forever** loop change the way the program runs?

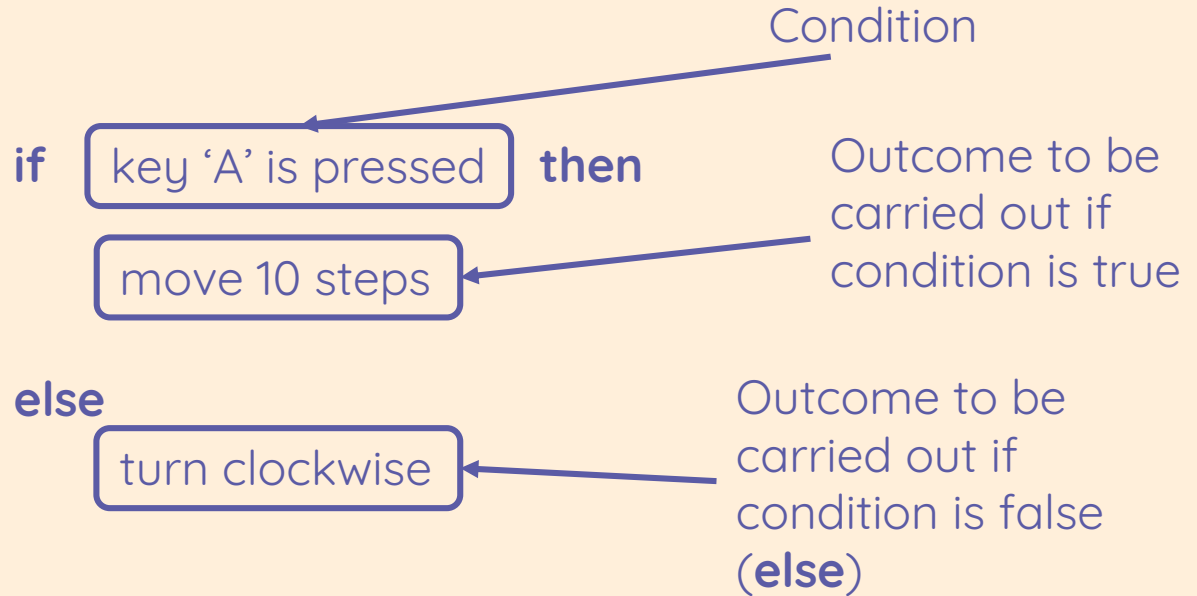


Explain your answer

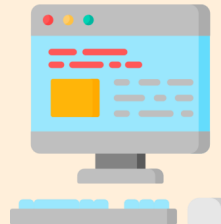
Different outcomes



Different outcomes

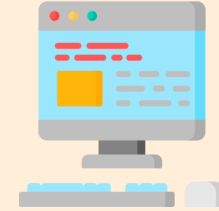
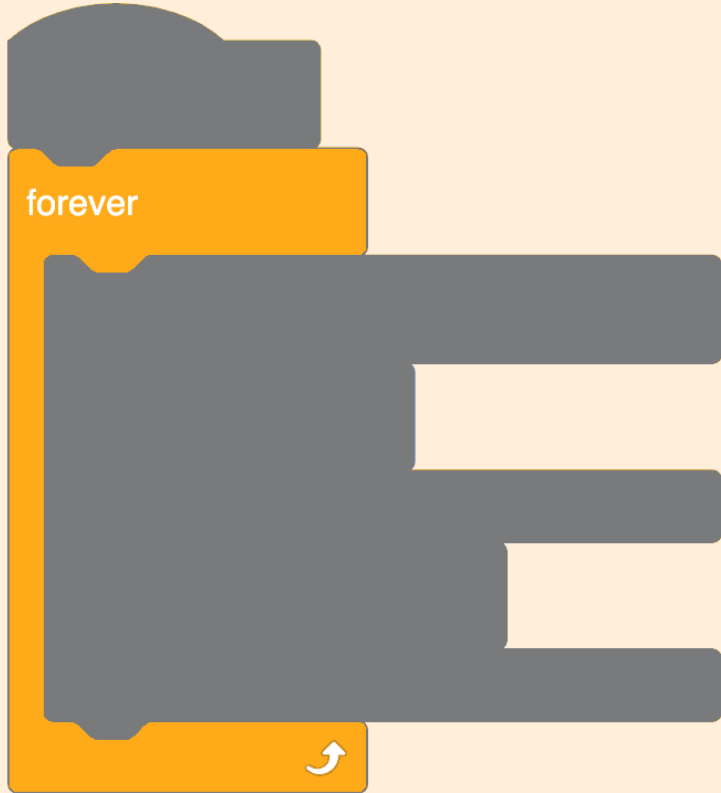


Create a program for this algorithm in Scratch using the dog sprite. Some of the blocks are provided.



Code this in Scratch

Did you remember the forever loop?



What did your program look like?



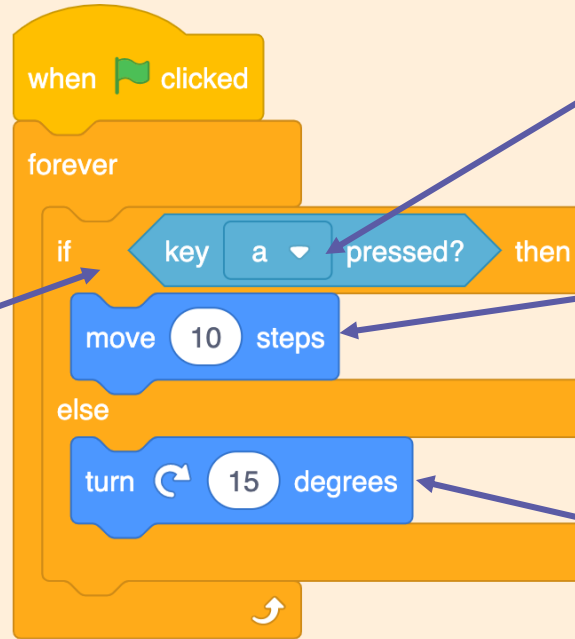
Record your program

Different outcomes – code solution

To write programs that use selection with two outcomes, we need to use an **if... then... else...** orange **control block**



Copy the program and see what happens. Describe your results.



The **condition** is placed here

Actions to be carried out when the condition is **true** are placed here

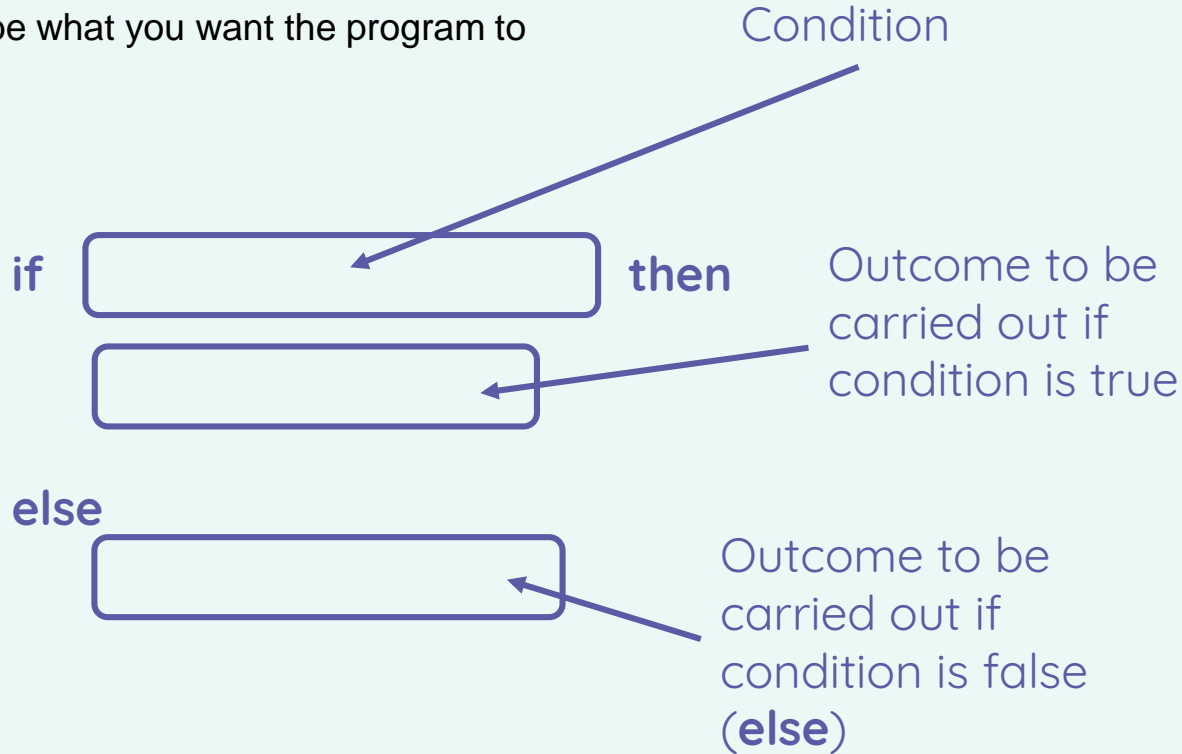
Actions to be carried out when the condition is **false** are placed here

Design and code your own conditional statement with two outcomes

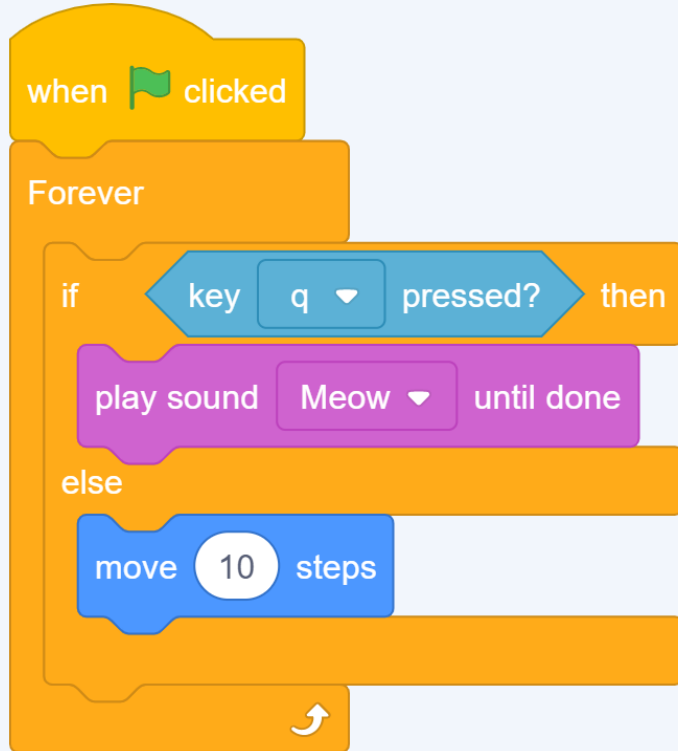
Design template



Describe what you want the program to do



Explaining outcomes

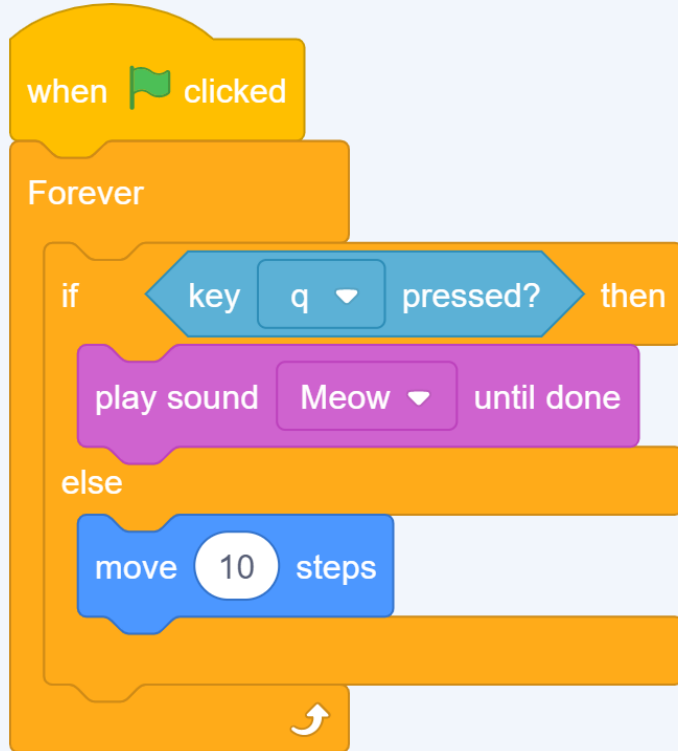


When I watched the program's output, the sprite moved off the screen.



Can you explain why this happened ?

Explaining outcomes

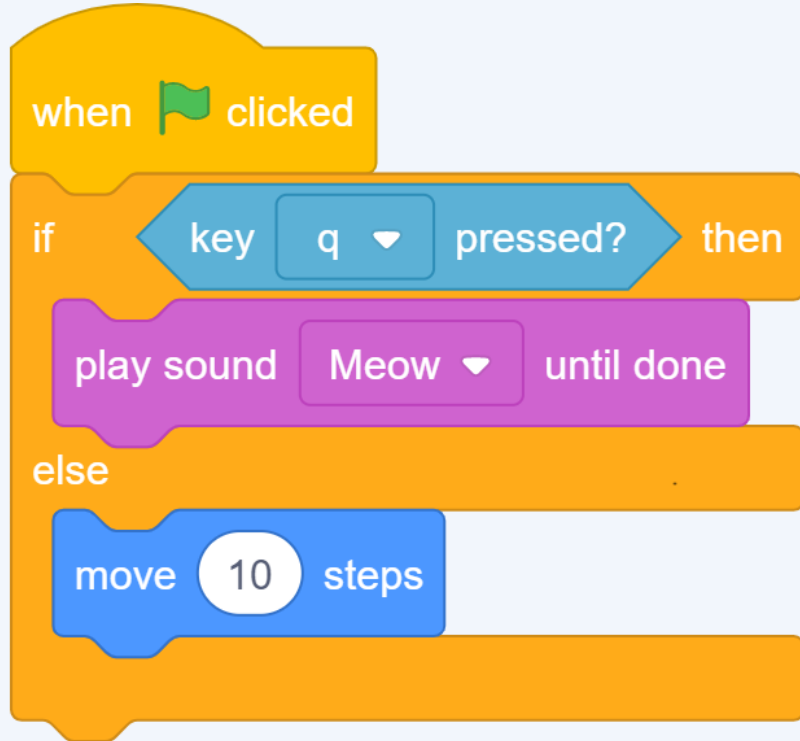


When I was watching the program's output, I heard the sprite make a 'Meow' sound.



Can you explain why this happened?

Explaining outcomes



When I press key 'q', my sprite does not do anything.



Can you explain why this happened?

How confident are you? (1-3)

- I can use selection in an infinite loop to check a condition
- I can identify the condition and outcomes in an 'if... then... else...' statement
- I can create a program with different outcomes using selection

3 – Very confident



2 – Unsure



1 – Not confident



Next lesson

In this lesson, you...

Used repetition in selection to repeatedly check a condition, you identified conditions and outcomes in selection using the 'if... then... else...' structure, and you created programs which used conditional statements with two outcomes

Next lesson, you will...

Explain how the different outcomes in a conditional statement will be selected, design a program that uses the 'if... then... else...' structure for selection, and implement your design as a program