

Computing

Loop the loop!

Lesson 3 of 6

Rebecca Franks



Investigate the code

Use this link to find the Scratch file: oaknat.uk/comp-TerasAdventure

Question 1

Look at the Repeat until loop that is used with the star sprite. What condition needs to be 'true' for the loop to terminate?

Question 2

In the same Repeat until loop, What does the Move 15 steps block do?

Question 3

The star sprite also contains a Forever loop. Describe the role of the first two motion blocks inside the Forever loop.



Investigate the code

Use this link to find the Scratch file: oaknat.uk/comp-TerasAdventure

Question 4

The same Forever loop contains this block of code:



What do you think the block of code does?

Source: Scratchblocks

Question 5

Looking at the same Forever loop, describe the purpose of its design.

Question 6



What do you think this block of code on the **star** sprite is used for? Why is it needed?

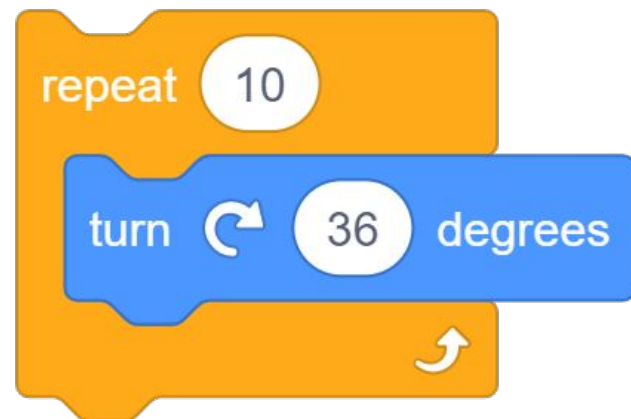
Source: Scratchblocks



Investigate the code

Use this link to find the Scratch file: oaknat.uk/comp-TerasAdventure

Question 7

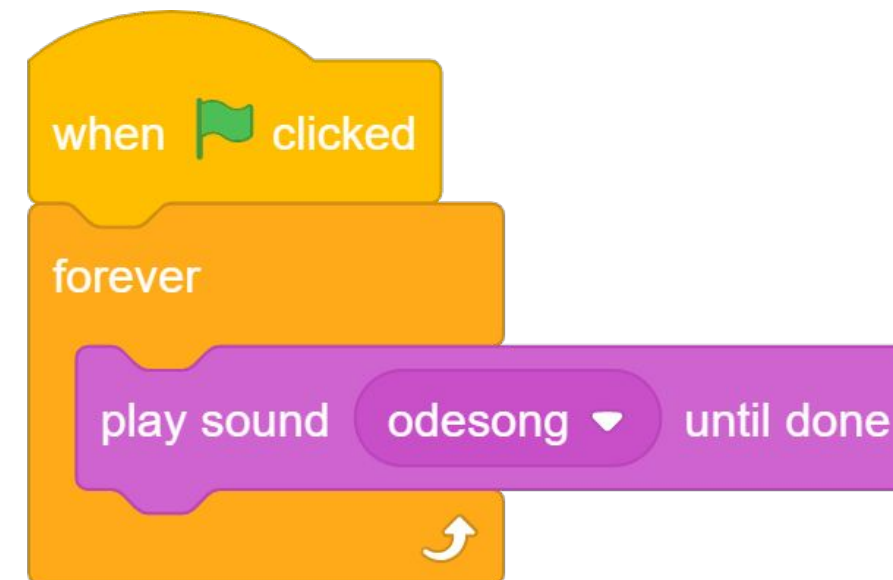


Why has this code in the **Tera jump** subroutine been used instead of **Turn 360 degrees**?

Source: Scratchblocks

Question 8

Why does the **Play sound** block need to be inside this **Forever loop**? What is its purpose?



Source: Scratchblocks

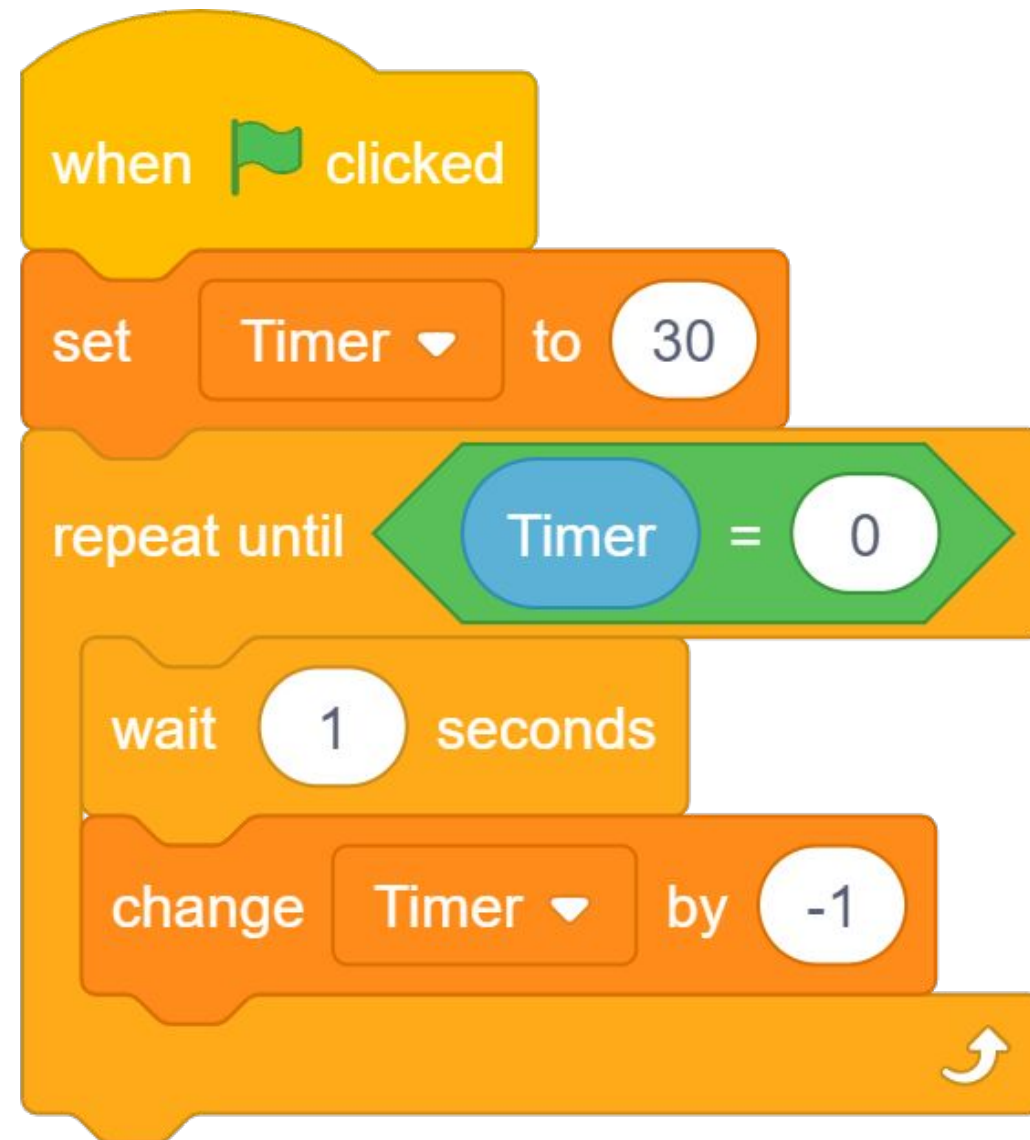


Investigate the code

Use this link to find the Scratch file: oaknat.uk/comp-TerasAdventure

Question 9

This block of code is used as a countdown timer for the game. Which other type of loop could have been used for the same purpose? Describe how it could have been used.



Source: Scratchblocks



Investigate the code

Use this link to find the Scratch file: oaknat.uk/comp-TerasAdventure

Question 10

In the **Tera angry** subroutine, why has a Repeat (30) loop been used for the costume instead of a Repeat until loop?

Question 11

This block of code uses a Forever loop. Could a Repeat until loop have been used instead? Explain your answer.

```
when clicked clicked
set Stars to 0
forever
  if touching star then
    Tera Cheer
    change Stars by 1
  if touching snowflake then
    Tera Angry
    set Stars to 0
```

Source: Scratchblocks

