

## Computing – Scratch

### Lesson 2

Yesterday we learnt how to create a sprite and make it move in four different directions without disappearing. Today we are going to learn an alternative for making a sprite move before comparing the two methods.

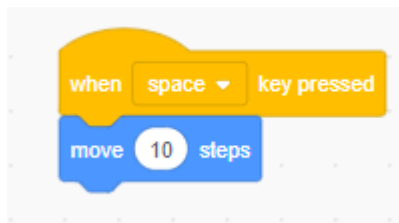
Just as you did yesterday, you will need to go to the following web address and log in.

[Scratch - Imagine, Program, Share \(mit.edu\)](https://scratch.mit.edu)

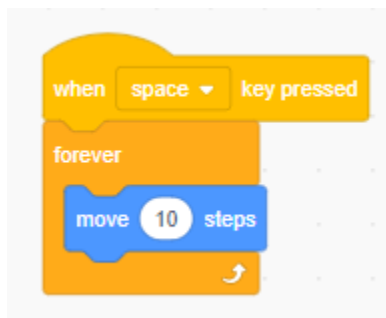
Once you have logged in you will need to click on create to start a new project.

There should already be a sprite in the stage for you but if you would like to change the sprite feel free.

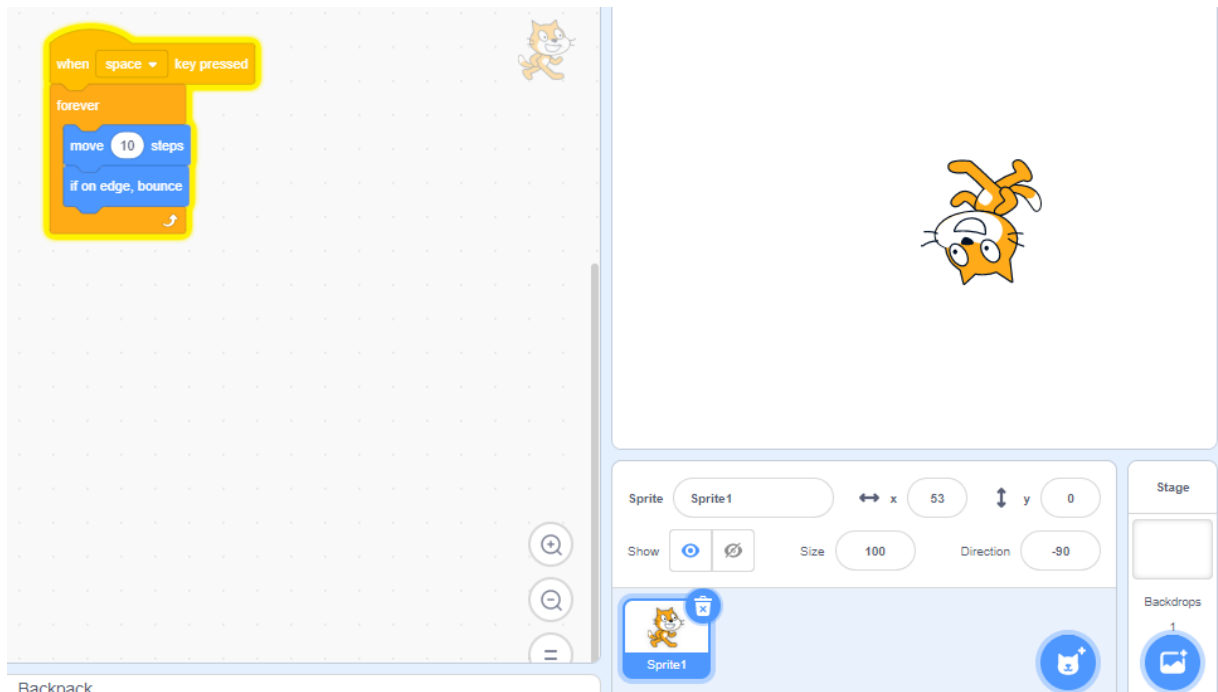
Building the following algorithm will make your sprite move every time you press the space bar. Have a go at doing this now. Remember you can change the speed the sprite moves at by changing the amount of steps he moves.



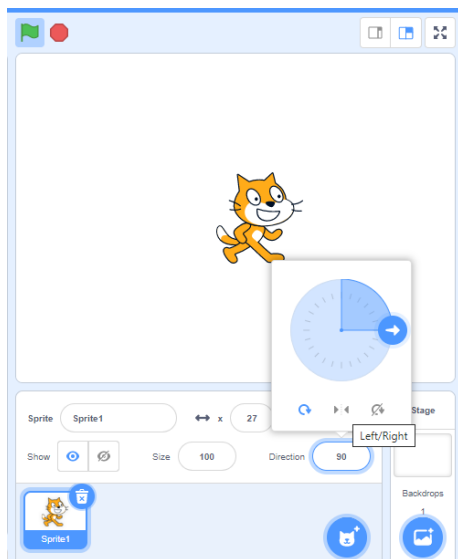
By adding the forever block the sprit will keep moving until you click the stop button.



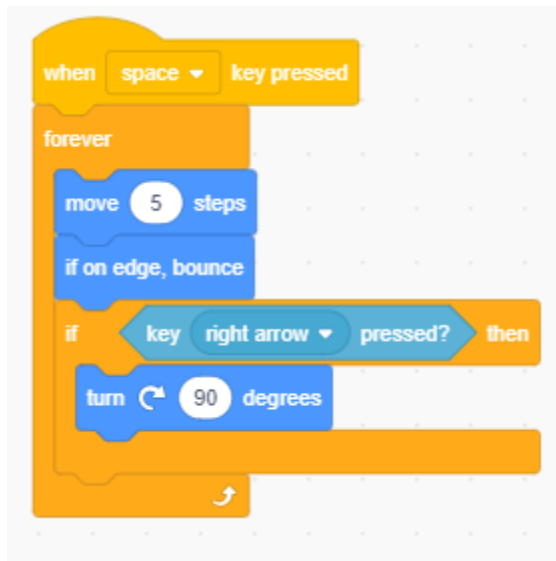
Just like yesterday, we have the problem that the sprite disappears from the stage. We can solve this in the same way by adding the 'if on edge, bounce' block. This has solved the problem of him disappearing but he is now upside down.



Click the direction box then the two small arrows to stop the sprite turning.



To be able to turn the sprite we have to build the following algorithm. When you first place the 'turn --- degrees' block it will say 15. Explore different numbers in this box. When is it easiest to control?



### Time to Reflect

1. Which algorithm was easier to build (today's or yesterday's? Which algorithm lead to more errors?)
2. Which algorithm would you use if you were making a game? Which gave you most control over the sprite? You may like to get a family member to try them both to get another opinion.
3. How could you change the algorithm to make controlling the spite easier or more difficult?