

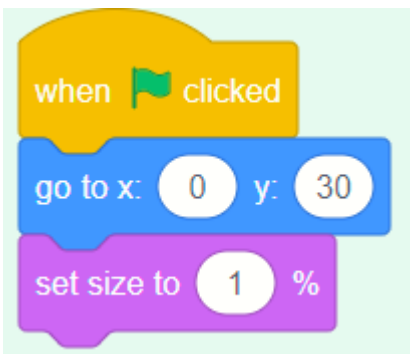
SPRINT!

Race your friends and try to beat each other's time. To play this game, use the left and right arrow keys to reach the finish line.

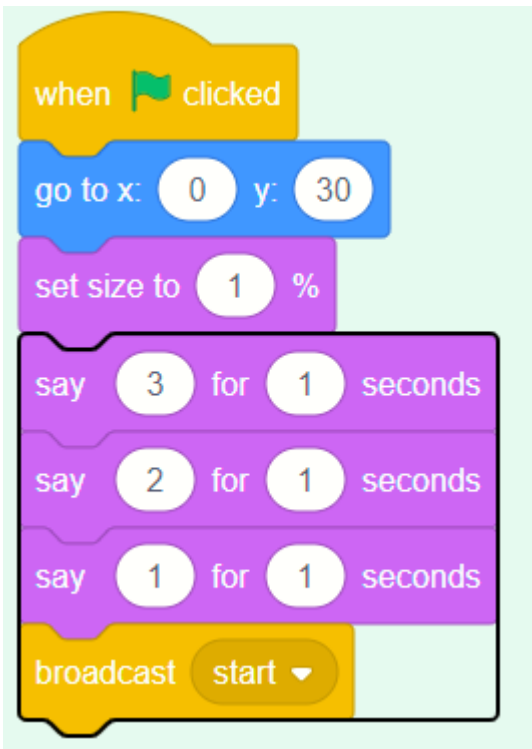
To get started remix the sprites available here <https://scratch.mit.edu/projects/398734941/>

To start with, let's put the finish line sprite on the horizon.

Use this code to do it:



Next using the looks code script, add the following code (this goes on the finish line sprite code):

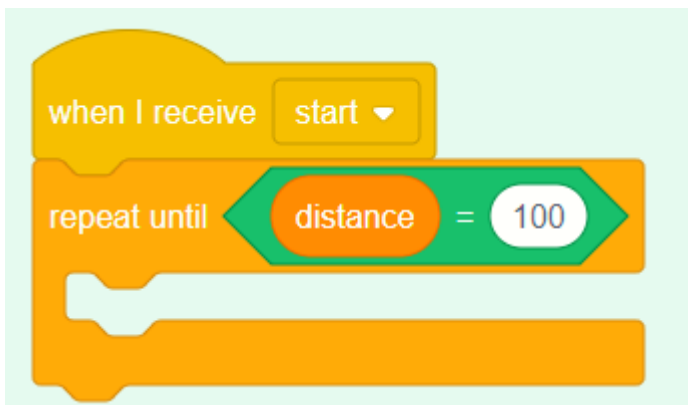


Next we are going to add a new variable called distance.

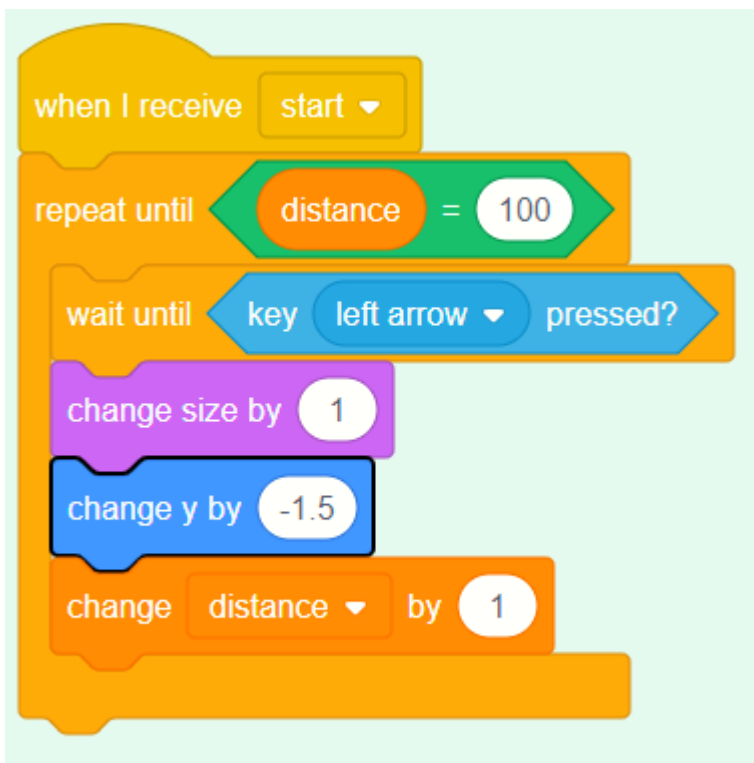
Add the following code to the top of the finish line sprite:



Once your race starts, your player should sprint for 100 metres, to do this add the following code to your finish line sprite:



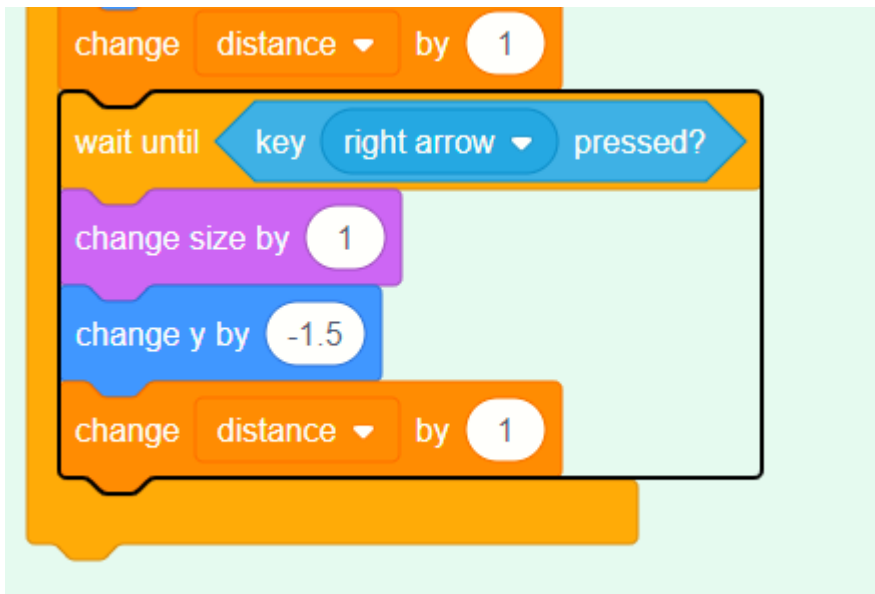
To make the finish line move towards you as you run fill in the repeat until bracket with this code:



This will create a zooming effect during the race.

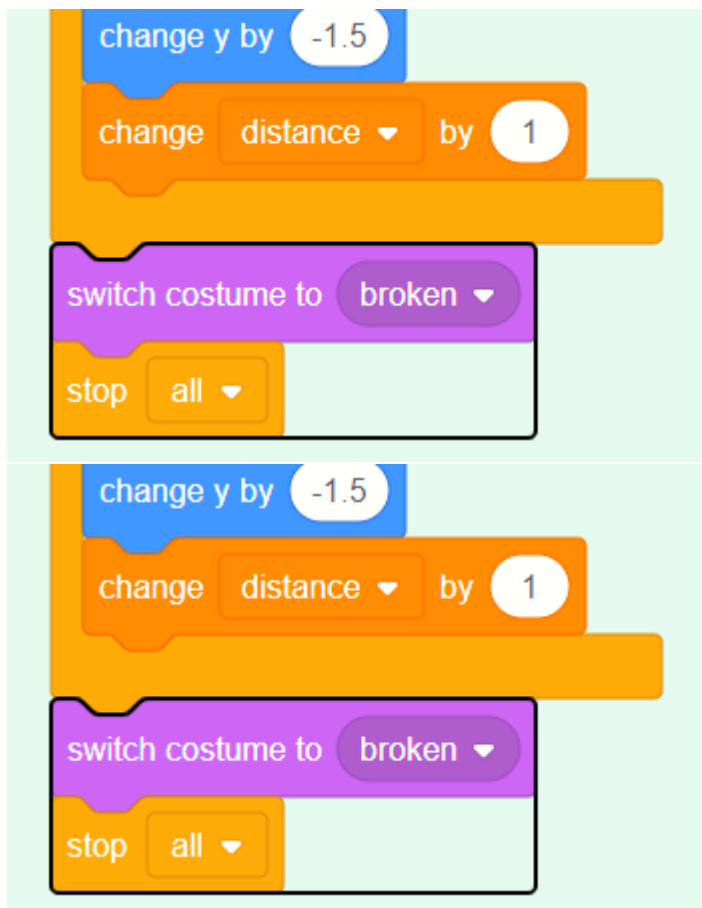
We have made code for the left arrow, now we need to do the same for the right arrow key.

Add this code under the chance distance by 1 block.

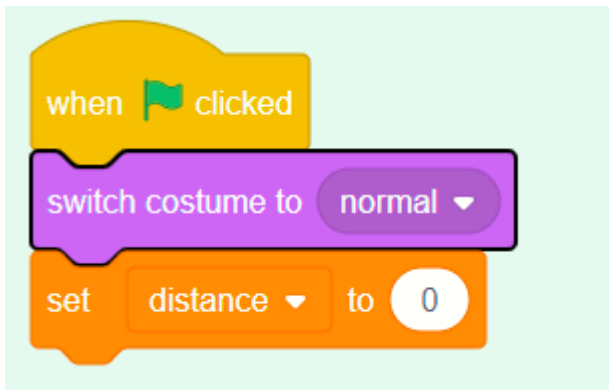


When you click on the finish line sprites costumes, you should see that there are two versions. If you have made the boat race scratch game you will be familiar with this.

To make the finish line costume change once you have completed the race, add the following code:

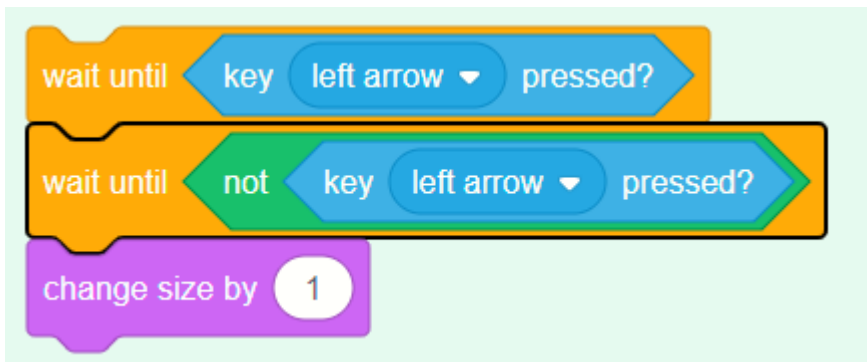


This code goes at the top of the when flag clicked code block, both are on the finish line sprite.



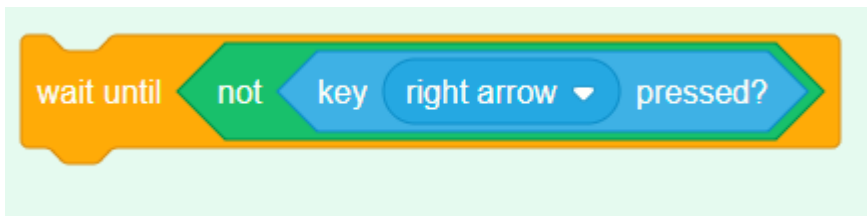
```
when flag clicked
  switch costume to normal
  set distance to 0
```

Like most video games, this one has a cheat. If you hold down the left and right keys you can beat the game really easily. To stop people from doing this add the following code:



```
wait until key left arrow pressed?
wait until not key left arrow pressed?
change size by 1
```

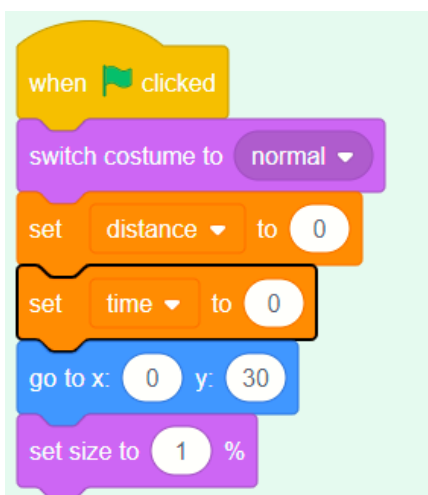
Add the same code to the right arrow code.



```
wait until not key right arrow pressed?
```

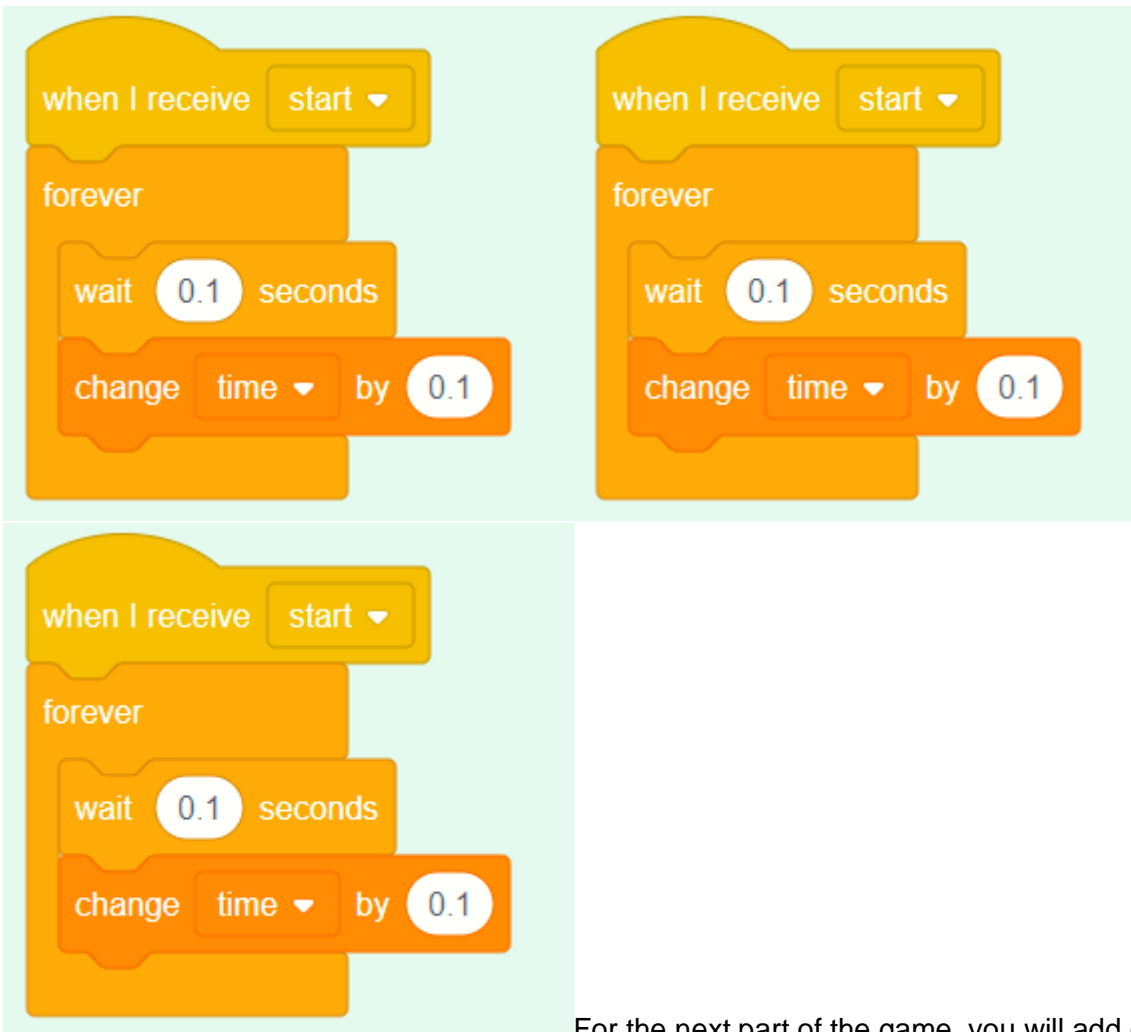
Most running races are timed, so let's add a timer to our game.

To do this create a new variable called 'time'



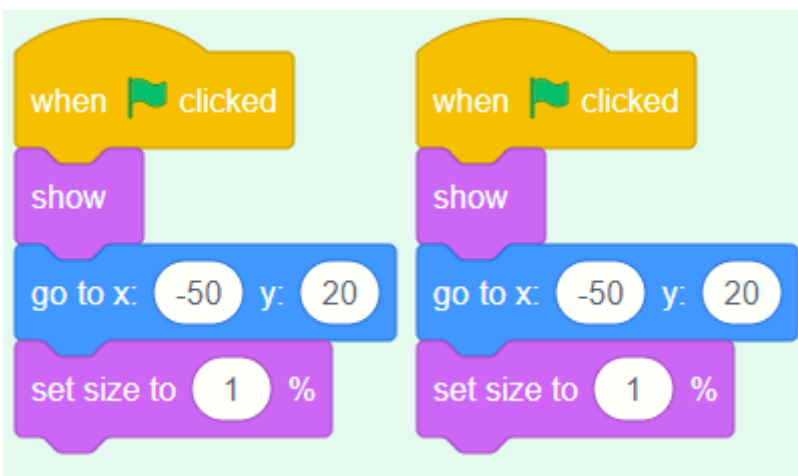
```
when flag clicked
  switch costume to normal
  set distance to 0
  set time to 0
  go to x: 0 y: 30
  set size to 1 %
```

If you have made the ghost busters game, you will be familiar with the timer code, add this code to the finish line sprite.



For the next part of the game, you will add code to the scenery to make it appear to be moving past as you run.

The first code to add to the tree looks will position it in the right spot and shrink it to scale.



Once the race starts the tree should move until the player finishes at the 100-metre mark.

To add scrolling scenery, add this code to the tree:

You may notice it looks like the code already in the finish line flag.

```
when I receive start
repeat until distance = 100
wait until key left arrow pressed?
wait until not key left arrow pressed?
change size by 1
change y by -1.5
change x by -2
```

```
wait until key right arrow pressed?
wait until not key right arrow pressed?
change size by 1
change y by -1.5
change x by -2

wait until key right arrow pressed?
wait until not key right arrow pressed?
change size by 1
change y by -1.5
change x by -2
```

This code also needs a right arrow script, add it below the 'change x by -2' block

Test your project!

If there are any problems, double check your work, especially the starting codes and the repeat until code blocks, these are often the culprit of code that doesn't work as it should.

