

Sprite wants to play catch ...

Vineet Srivastava

In this lesson, we will learn ...

- * How to create a version of the popular 'catch game'.
- * In doing this, we will take a closer look at the concept and usage of variables in making games.

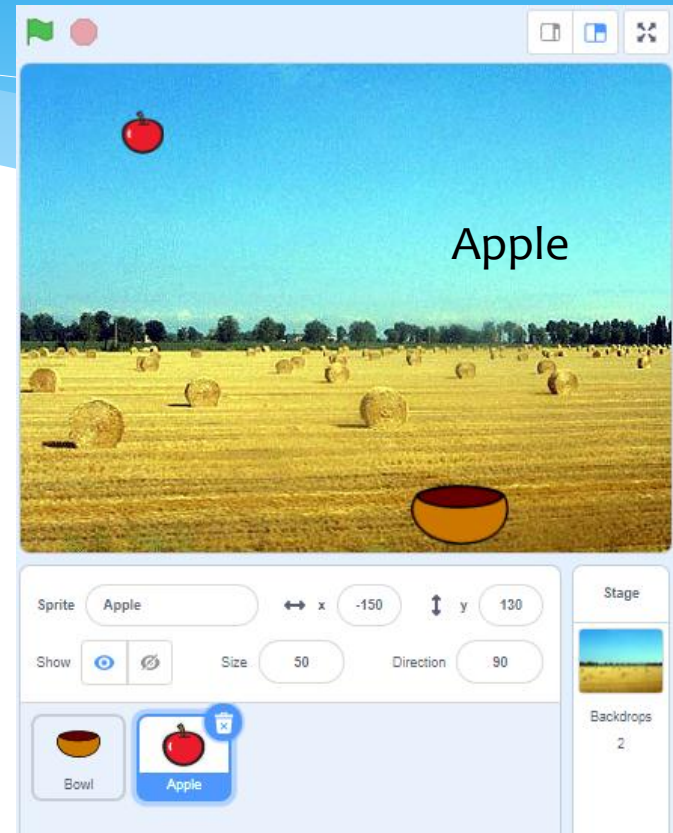
Let's recall, what are variables

- * Containers (or boxes) where sprites can keep bits and pieces of information and use them.
- * Variables help us in creating interesting new features within games.
- * Variables also help us to organize our code better.

Let's make CATCH game

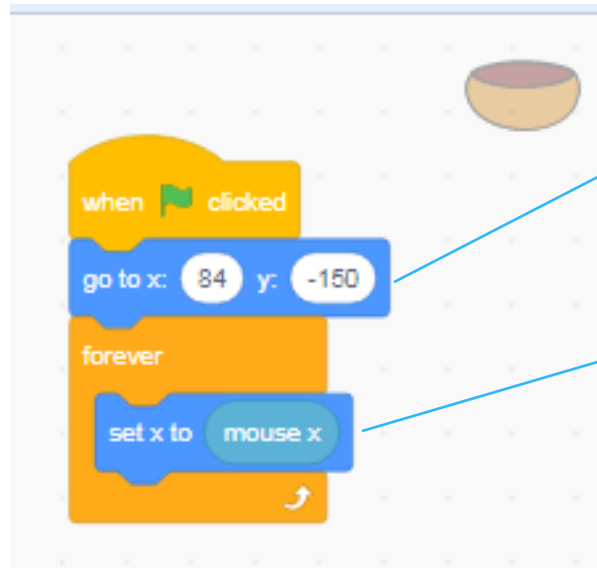
- * A bowl on the ground is supposed to 'CATCH' fruits falling from the sky.
- * For every apple caught, we score some points.
- * For every orange caught, we score some points.
- * But, if we catch a watermelon, we lose some points.
- * Game lasts for a fixed number of seconds.
- * You have to try and score as much as you can.

Add backdrops and sprite



Note: We have intentionally added only the apple sprite so far. We will use a 'trick' to add other sprites later.

Bowl code for movement



Send to the bottom of the stage

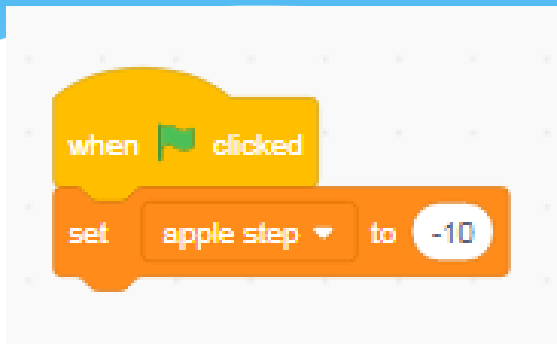
This code will ensure that the bowl moves left or right AS the mouse pointer is moved left or right.



block in the 'SENSING' blocks, which means the 'x value of mouse pointer.

Note: We can also use arrows for moving the bowl.

Apple code (Initial Position)

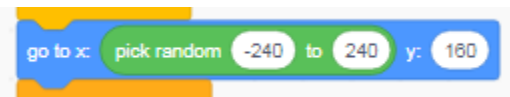


Use a variable to set APPLE SPEED.
This will allow us to keep a clean code.

Apple Falling



Go to a 'random x position' on top of
the stage,



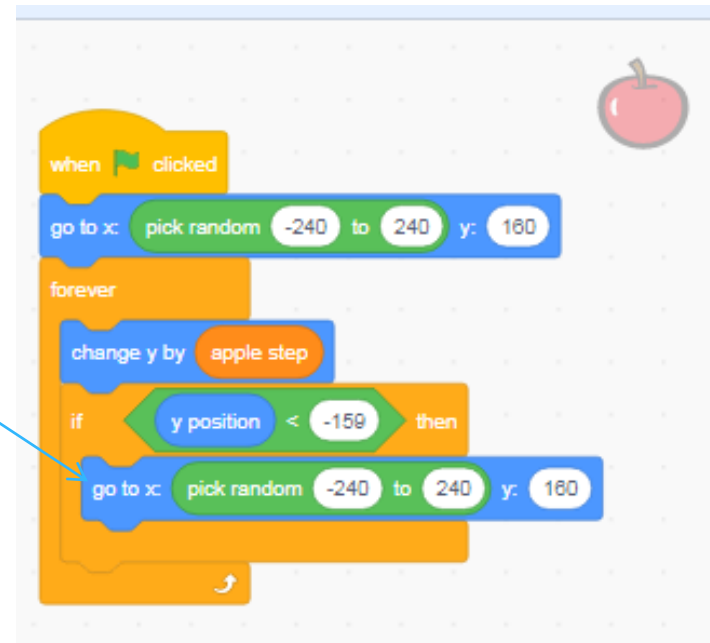
Pick a number between -240 and 240.

Apple code (Go back to the top)

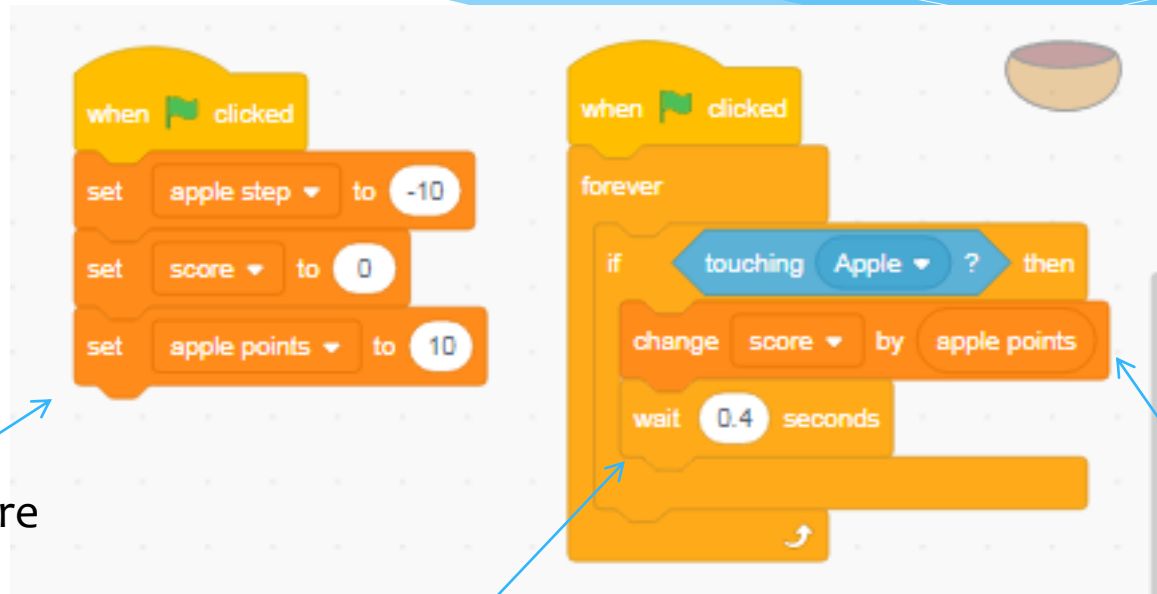
Once the apple has fallen to the ground, we want it to go back up, again to a 'random' x position.

If y position
becomes smaller
than -159, go back up

(recall, the bowl was
at y = -150).



Adding some more code to 'BOWL'



Add variables

score – Total Score

Apple Points –

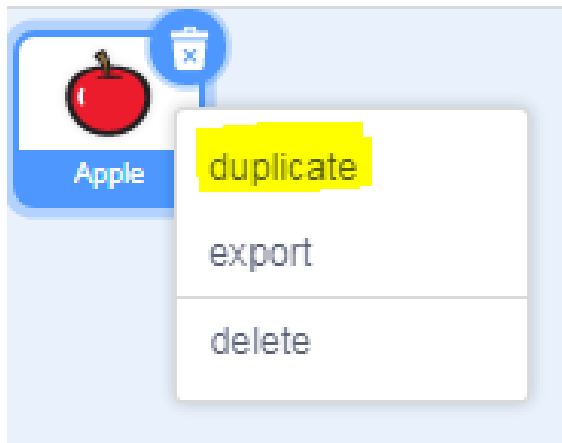
Points scored when I
catch an apple

Add a small wait to
avoid multiple 'touch'
events from getting
added!

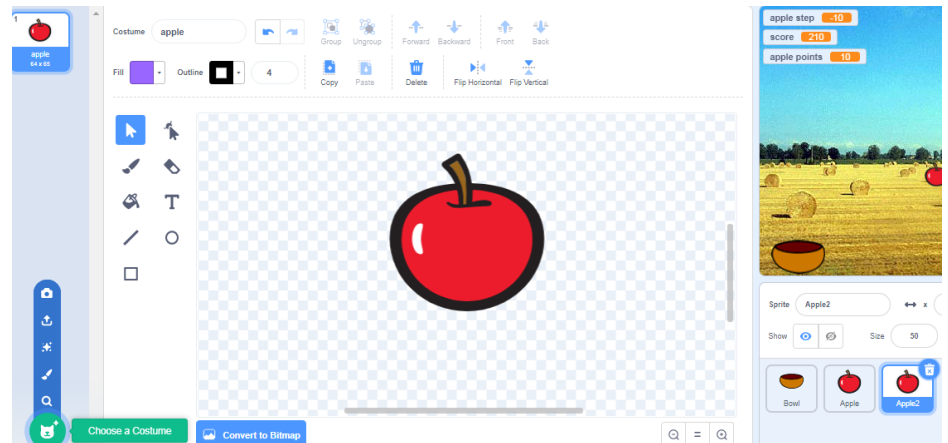
If I touch 'APPLE', change the score
by 'apple score'. e.g, since 'apple
points' is 10, every apple I catch
increases my score by 10 points!

Now, to add 'ORANGE' sprite

- * Instead of adding all the code all over again, Select 'APPLE' sprite and use 'DUPLICATE code'.

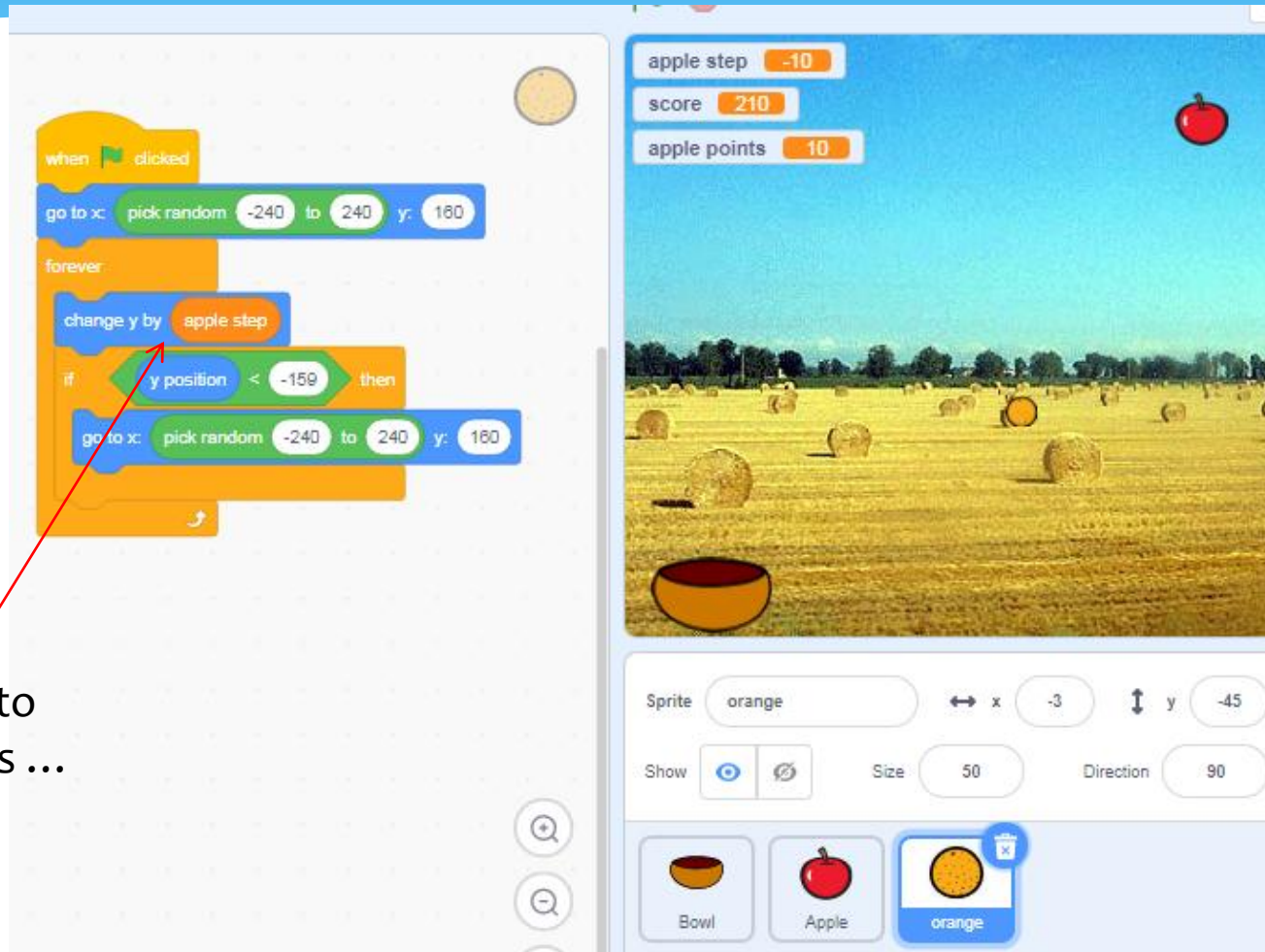


Right Click



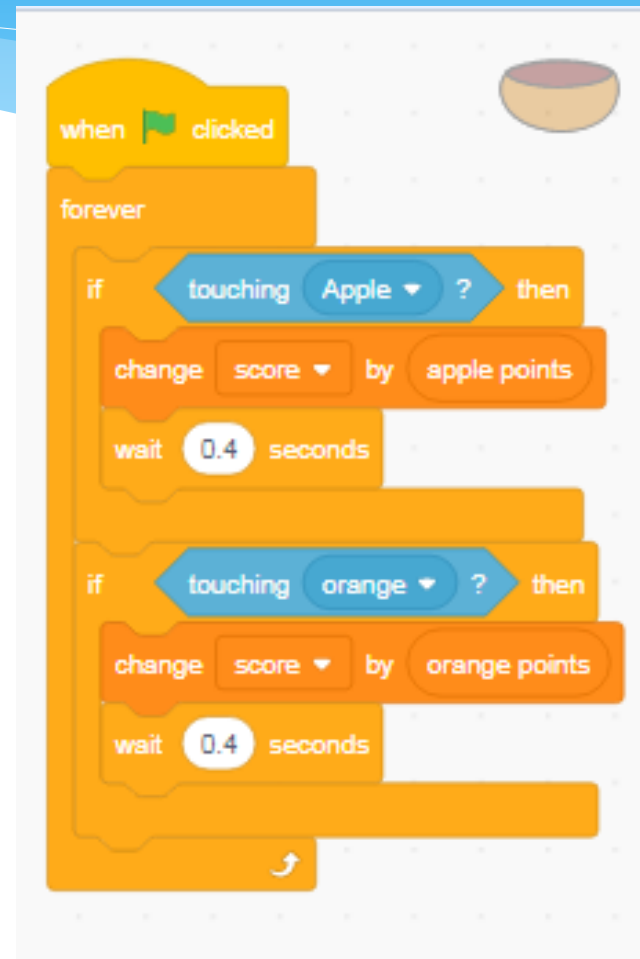
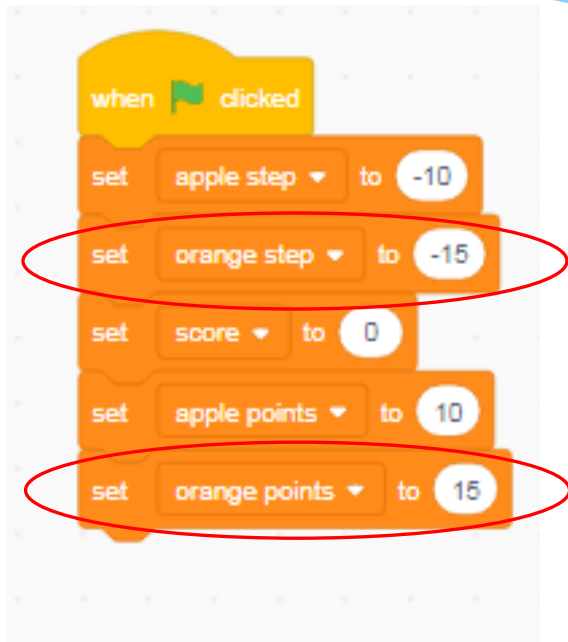
Change the sprite to Orange and re-name

We have all the code ready

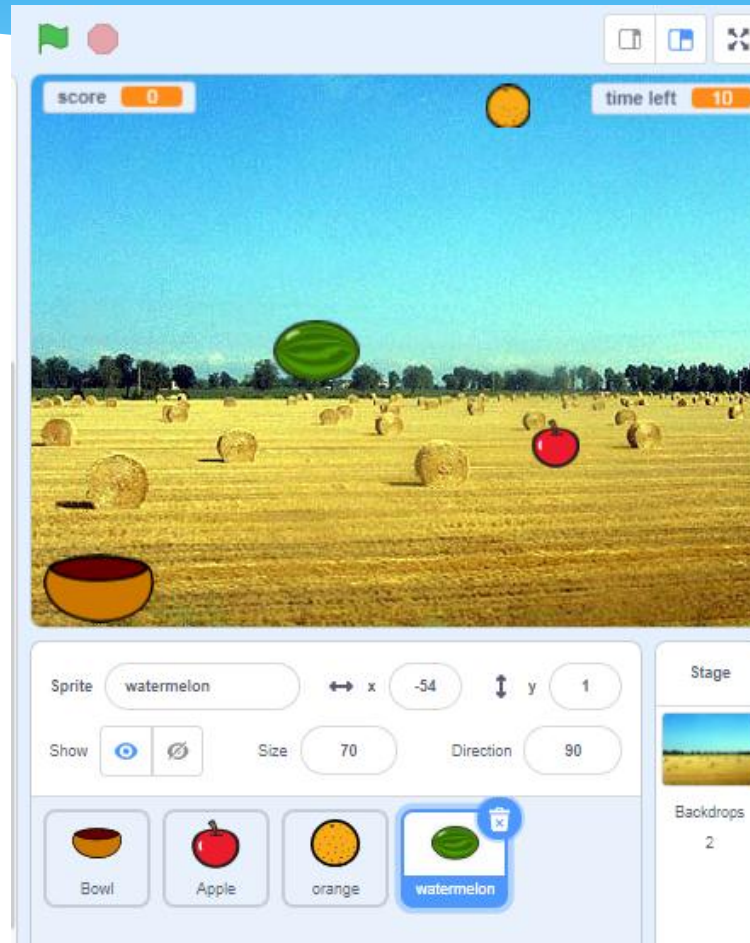


Just need to
update this ...

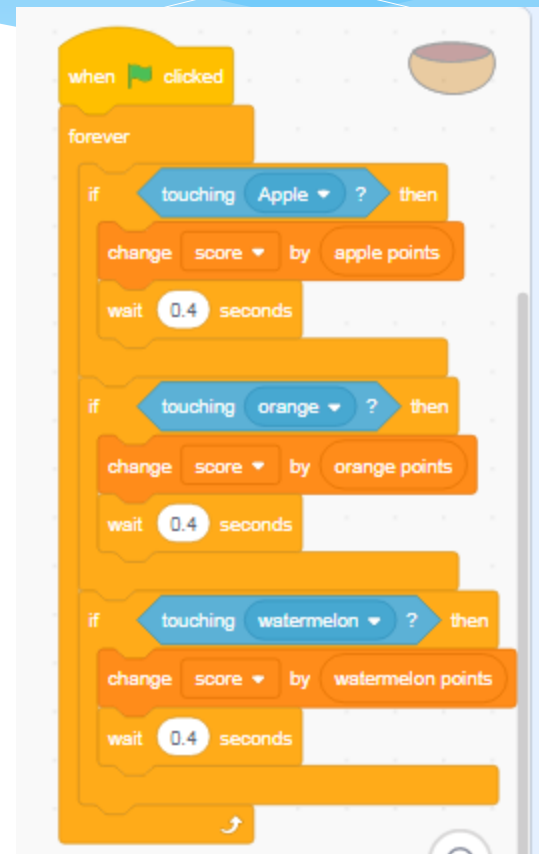
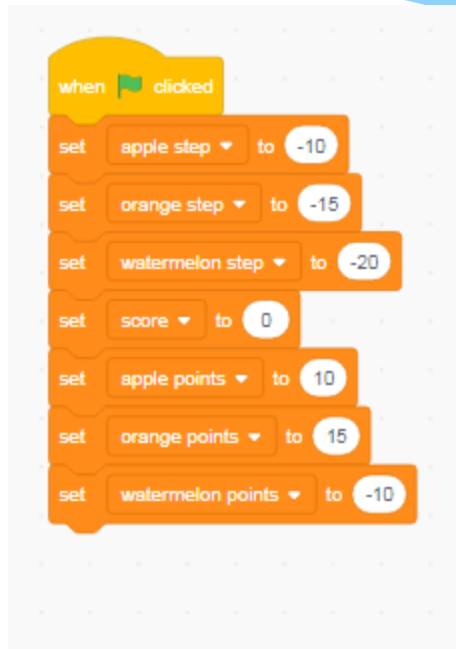
Create a few more variables



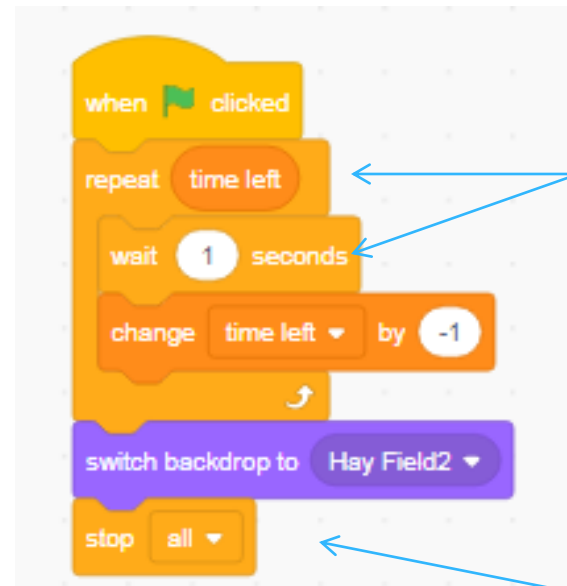
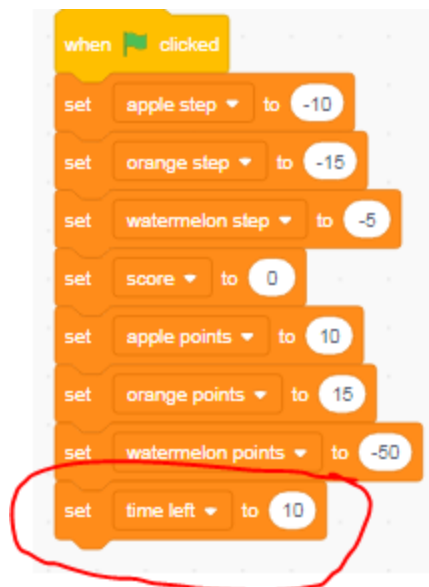
Similarly Add a Watermelon sprite



And some variables ...



Add a timer



Notice, the game will last for 'time left seconds'

Stop everything when the time is over.

And you are all set ...

- * We saw how we used concepts that we have learnt till now in making a very simple but engaging game.
- * We also saw how variables helped us – in keeping track of time and score, and also in keeping the code clean.
- * With this, you are all set for your independent activity – 7: A catch game. Enjoy!