

Sprite wants to play ...

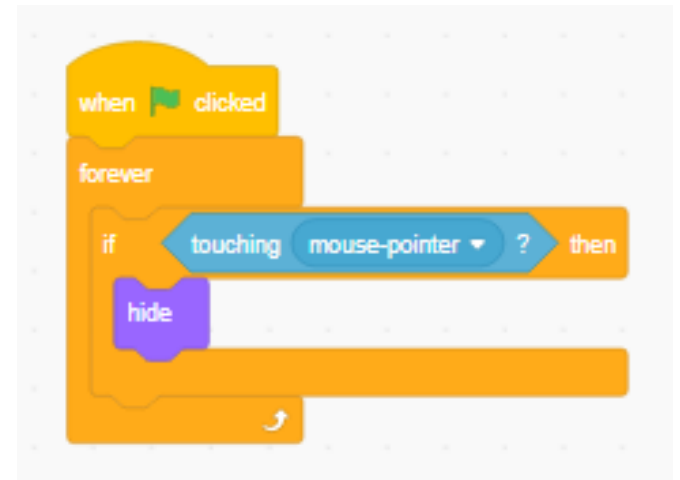
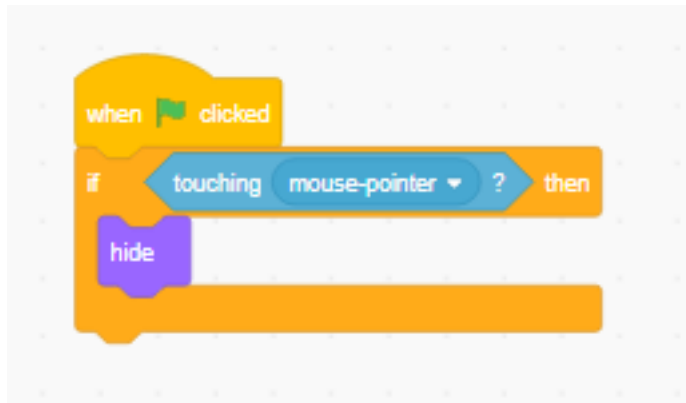
Vineet Srivastava

In this lesson, we will learn ...

- * how to use the keypress and the touch events.
- * how these events can be used in creating games.
- * how to create a simple maze game.
- * how we have to be very careful and clear in programming these, else our code can get very confusing very fast.

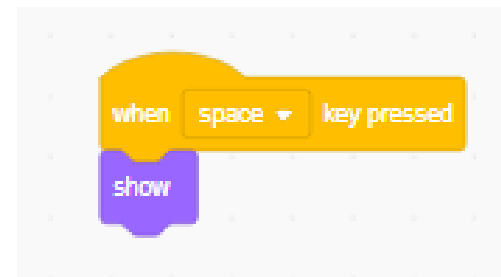
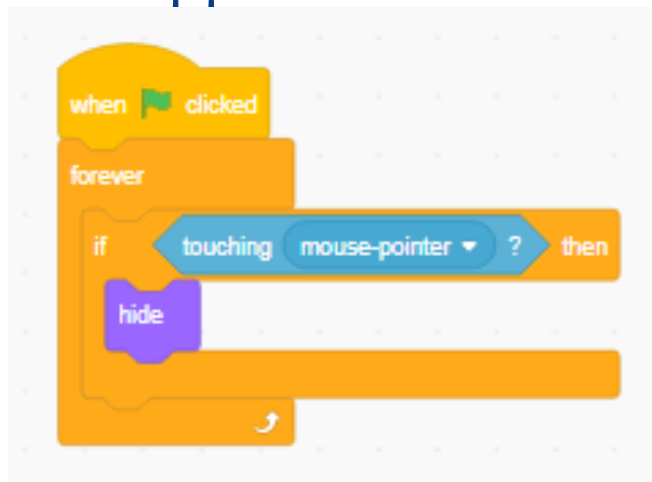
The touch event – Mouse Pointer

- * Try this code to see if it works. Why or why not?
- * Now try this? Take the mouse close to the sprite and see what happens.



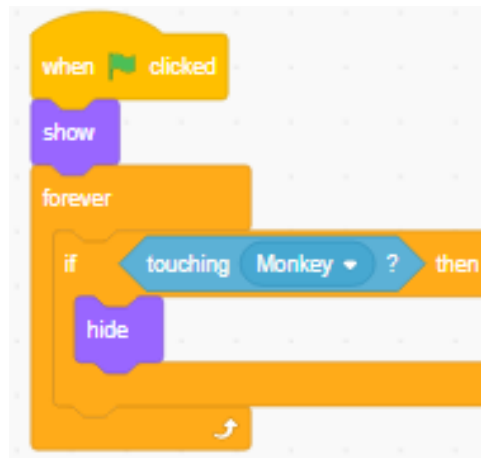
Now, to bring the sprite back

- * One way is to use the key pressed event.
- * Say we added this code. When space bar is clicked the sprite comes back ...
- * But be careful, if your mouse is very close, it may again disappear in no time.

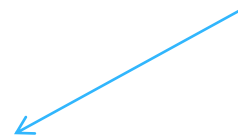


Touching another sprite

- * If there are two or more sprites, we have one more option.
- * Say we have two sprites, a monkey and a banana.
- * Do you see that the banana disappears when it touches the monkey?

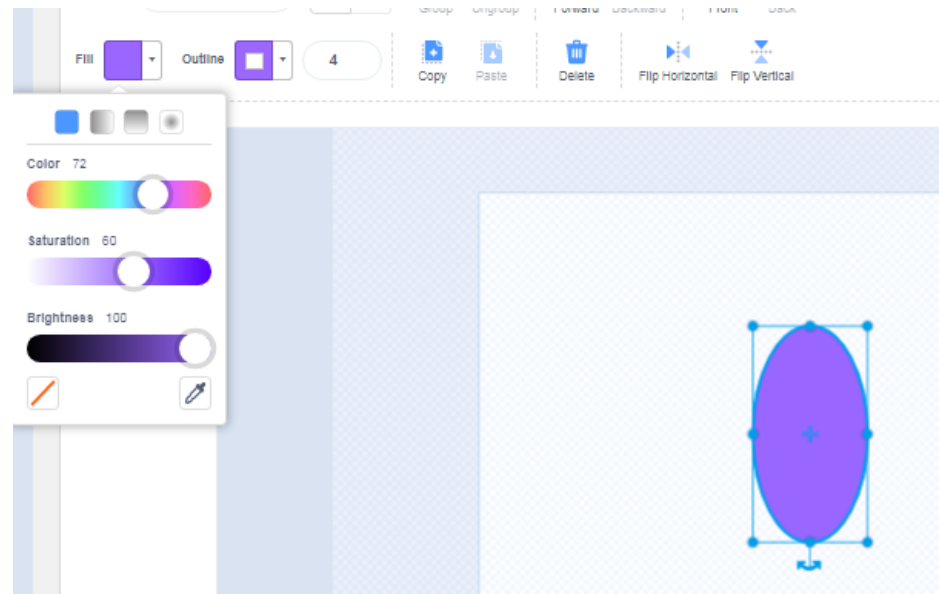


Hide if touching
monkey



Touching another colour

- * We can also check to see if the sprite is touching another colour?



Be very careful with the colour

- * What looks the same to your eye may not be the same to the sprite!

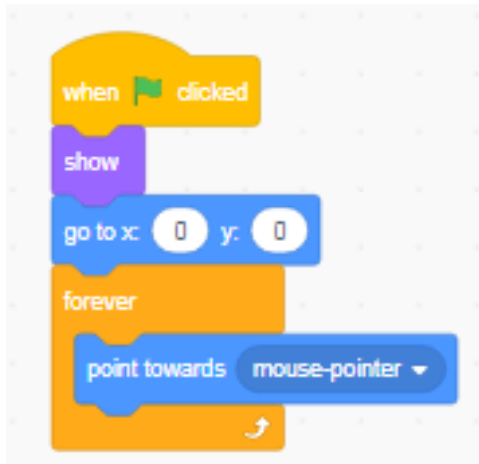


Do you know why?

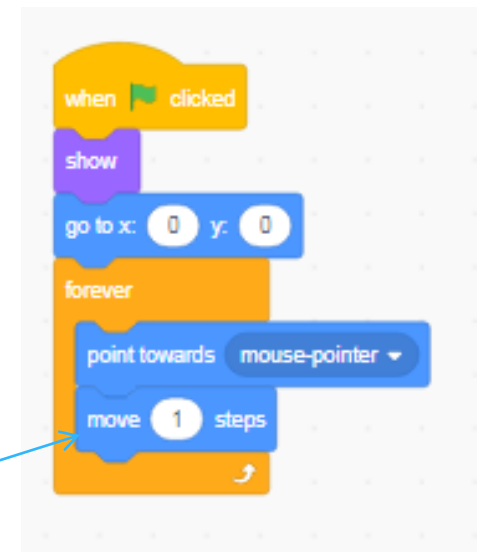
- * Sometimes the sprite just glides over the blue patch without disappearing. Do you know why?
 - * Notice, the glide completes first and then the check for touch happens.

Sprite Following the mouse

See how the sprite's direction changes as the mouse is moved.

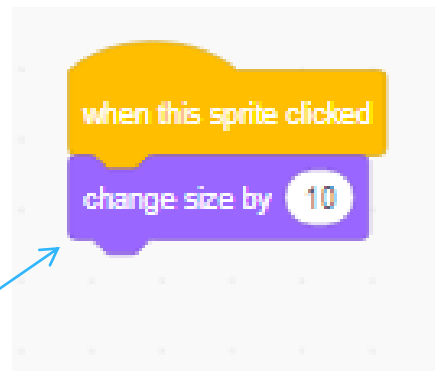


See how the sprite moves towards the mouse pointer ...



Control
the speed

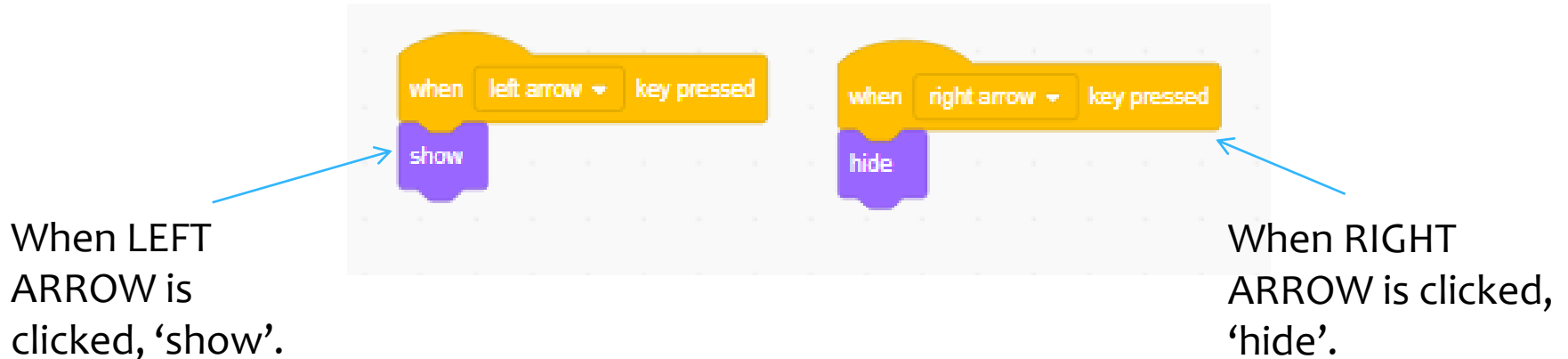
Responding to mouse click



Make sprite
bigger by
clicking on it.

Responding to keypresses

- * These blocks allow us to respond to key presses from our keyboard.



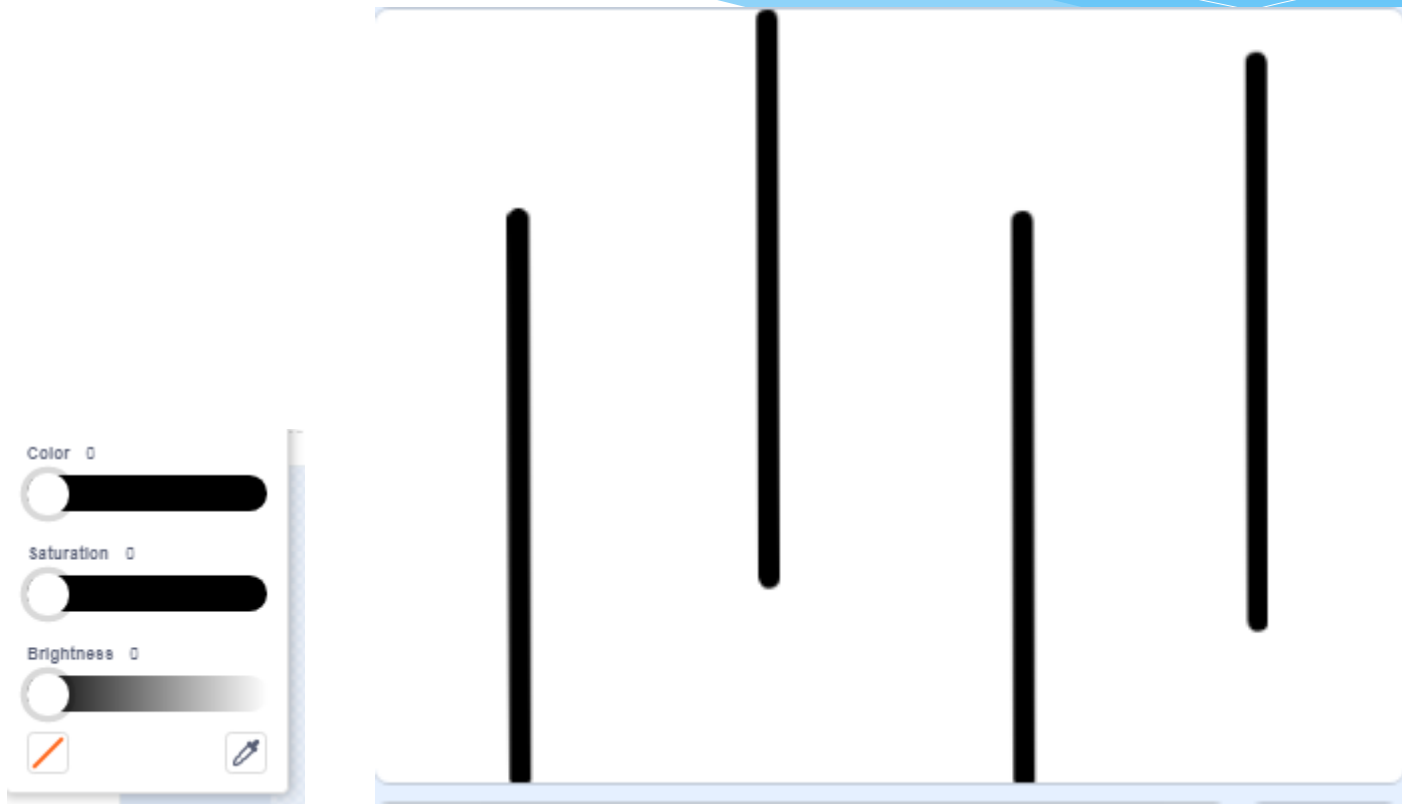
Almost any key can be selected from the drop down menu.
Often these are used to move/hide/change the size of sprites.

A simple maze game

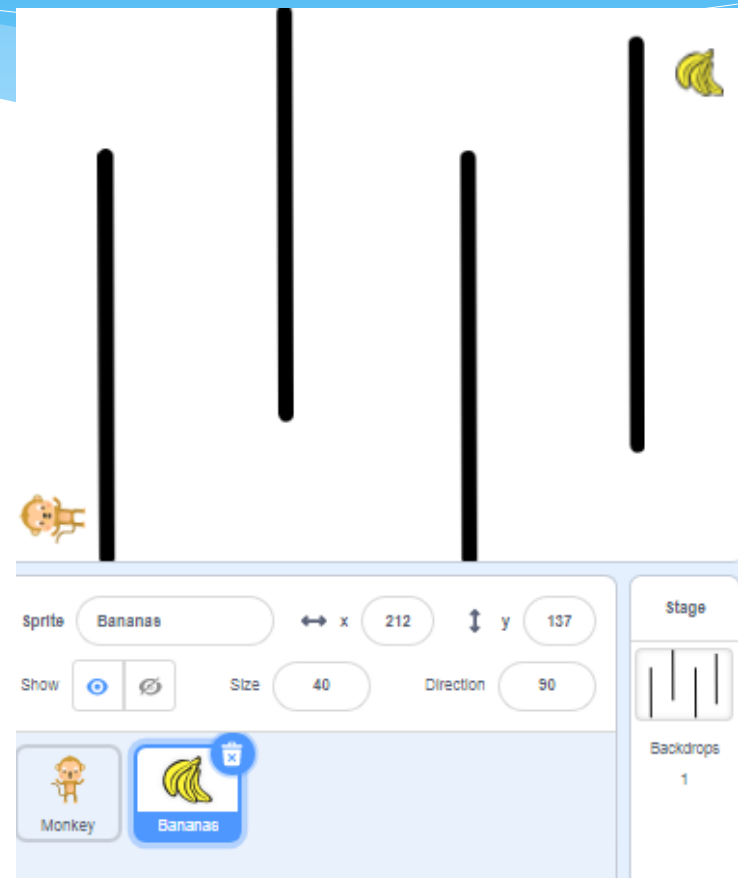
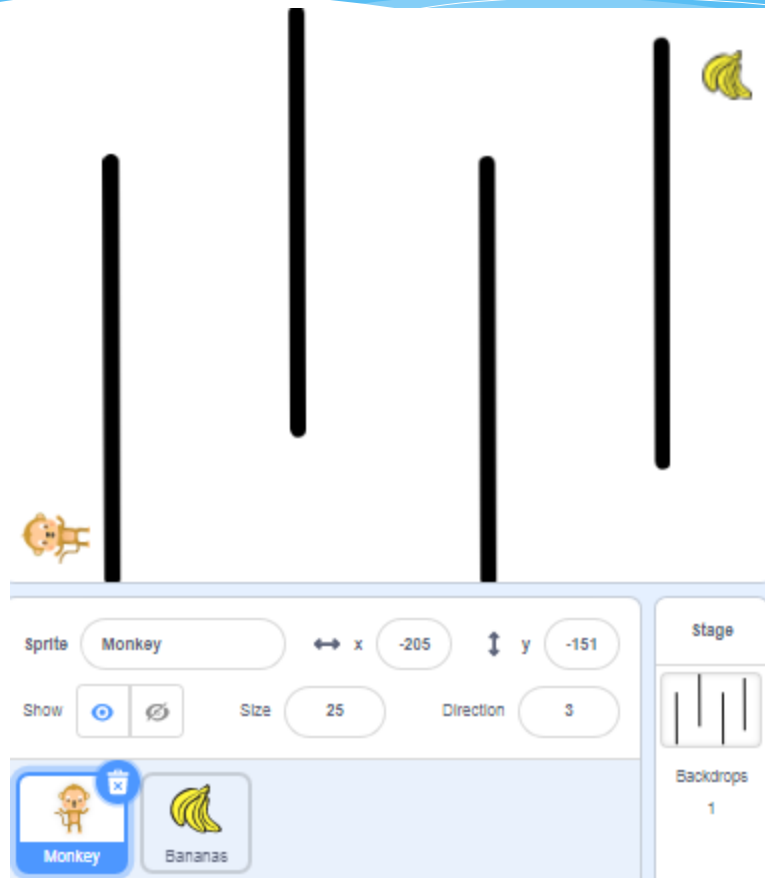
- * Steps

- * Create a maze backdrop.
- * Choose two sprites.
- * Enable one sprite to move in the maze.
- * Create code to detect if the sprite is touching the maze.
- * Create code to detect if the sprite completed the maze.

Create a simple MAZE backdrop



Sprites – Monkey and Banana



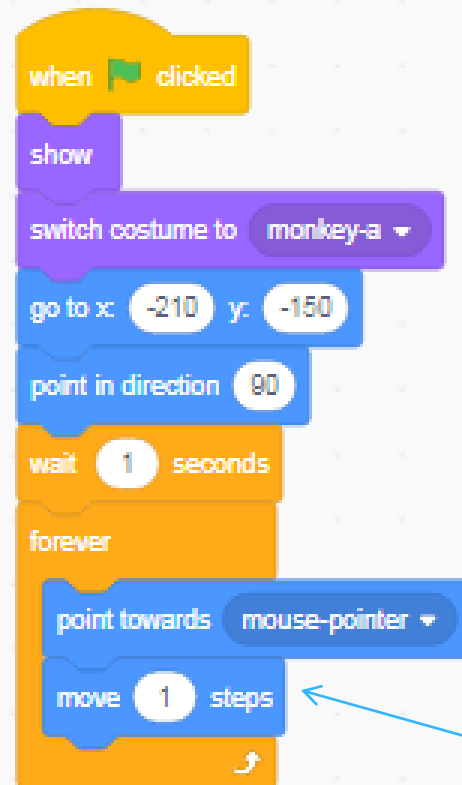
Monkey Code – (Movement)

Initial Costume

Initial Position
and Direction

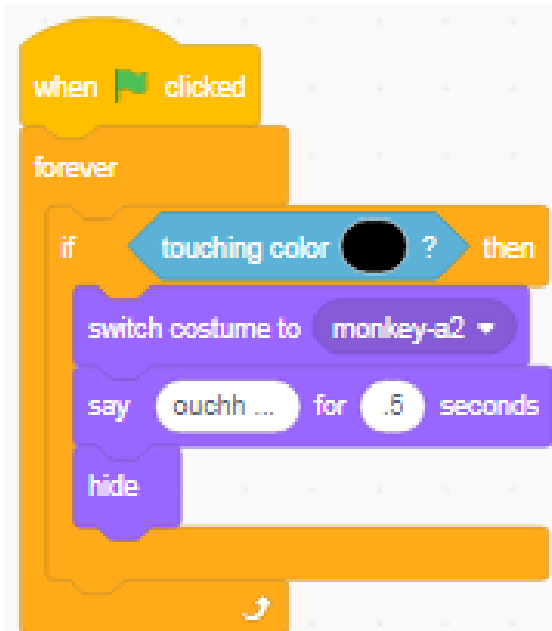
Initial Wait (Just
to stabilize)

Move towards
mouse

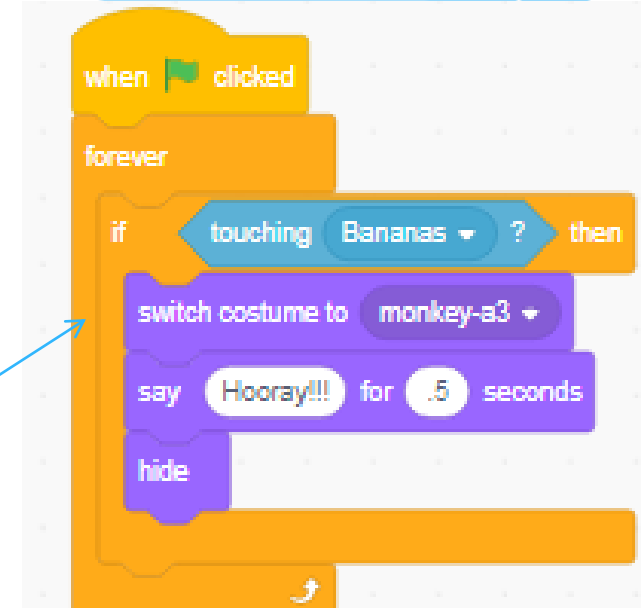


Can be used to
change the speed,
hence difficulty

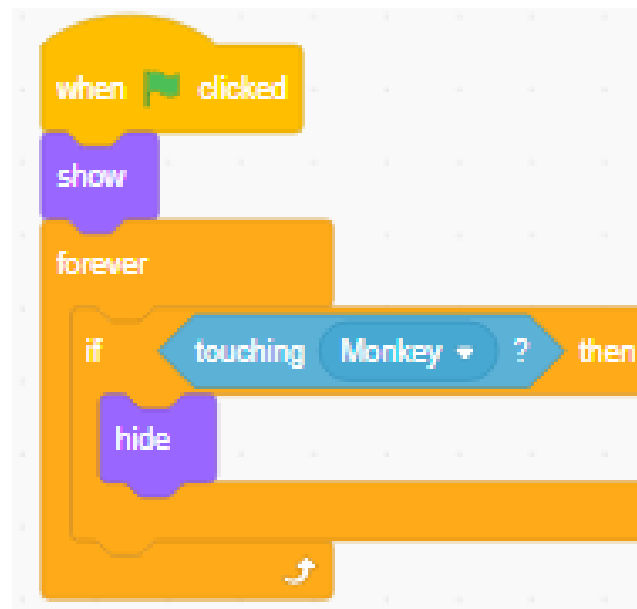
Monkey Code (Touching Maze/Banana)



Pick up
appropriate
costume



Banana Code



Hide if touching
monkey

And you are all set!

- * Clearly this is a very simple game. You can add many elements to it, like more lives, more obstacles, timer etc.
- * With this, you are all set for your fifth independent activity of this program – a maze game.