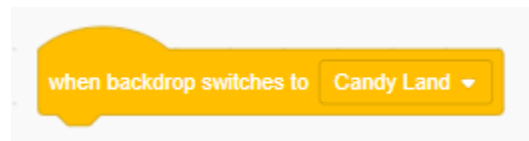


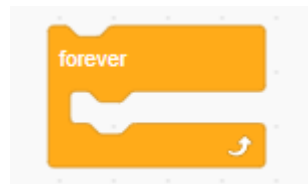
# **Teaching Programming Fundamentals with Candy Catch (Scratchathon) – Commented Code**



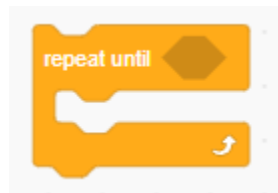
This means when the Green Flag is clicked, all the code attached to this block will execute.



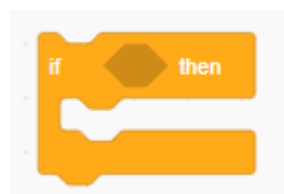
This means when the background switches to the backdrop called “Candy Land”, all the code attached to this block will execute.



Anything you put inside a forever block will repeat forever until the game ends or the red flag is click



This block will repeat the code inside of it until a condition has been met. For example, if you use the condition “touching green” the code will execute until the color green is touched which will then cause the code to end.



An If-Then block will only run when the condition is met. If a condition is met then the code inside will execute until the condition is no longer met.

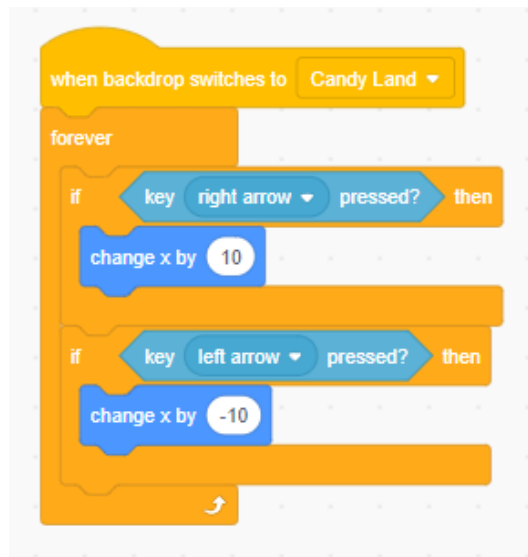
# Sprite Movement

This changes the location of the object by any number you put along the X-Axis



This is a sensing block. This block has been set to activate when the right arrow key is pressed. You can assign any key to it.

This block of code is checking to see if the right arrow key is being pressed. If the right arrow key is pressed, then the sprite will move positive 10 steps along the x-axis. This will repeat until the right arrow key is released.



Once you've created a condition for every key being used then you want to put each "If-Then" block inside of a forever block so these conditions will be continuously checked until the red flag is pressed or the game ends.

# Make Object Go To Top And Fall

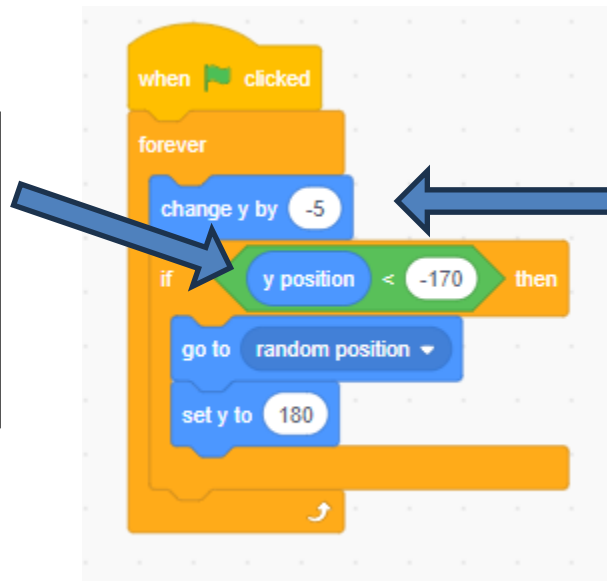
This tells the object to go to a random position



This sets the y-axis to 180

When the Green Flag is clicked, the object will go to a random position first and then move up to 180 on the y-axis. Since there is no forever loop, it will only happen once when the green flag is clicked.

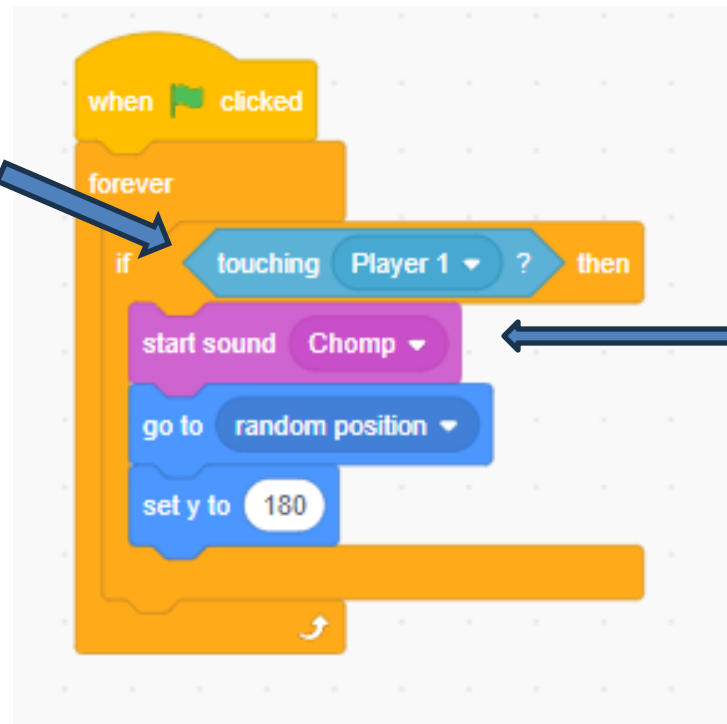
This is an operator block. If the first variable is less than the second variable, then the code will execute. In this case if the y position of the object is less than -170 on then the condition will be met to execute.



This changes the y-axis of the object by -5.

When the Green Flag is clicked, the y-axis of the object will forever change by -5 unless the y position of the object is less than -170. Then the object will go to a random position and set y to 180. This will be checked until the game ends or the red flag is clicked.

# Make Sound When Object Touches Sprite



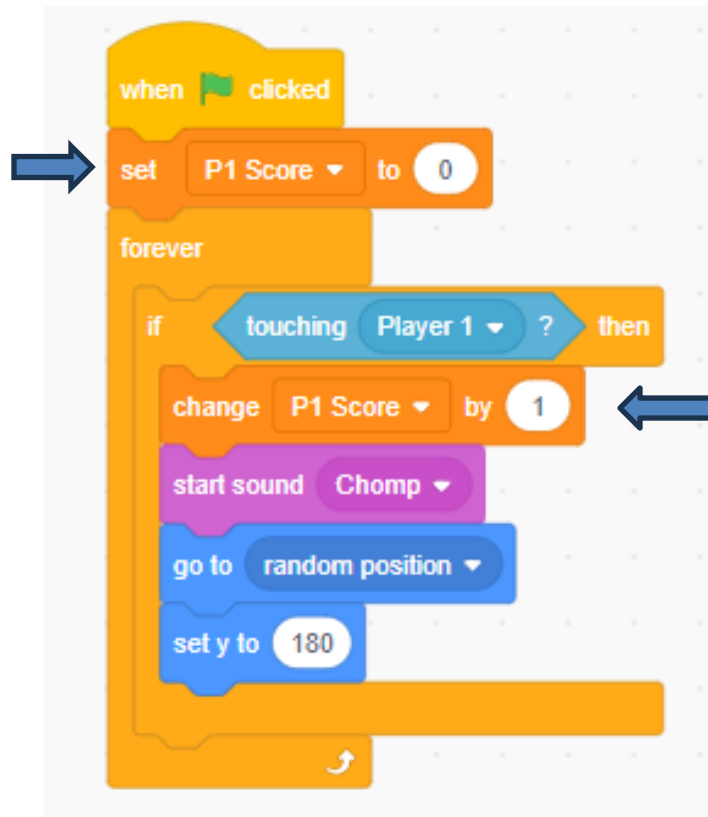
This senses if a specific sprite is being touched

This starts playing a sound you pick

When the Green Flag is clicked, if the object is touching the sprite named "Player 1" then a chomp sound will be played, the object will go to a random position, and then the y-axis will be set to 180. This is in a forever loop so the conditions will be checked until the red flag is clicked or the game ends.

# Catching The Object

This sets the variable you created “P1 Score” to 0.



This changes the variable called “P1 Score” by 1 when the condition is met.

When the Green Flag is clicked the variable “P1 Score” will be set to 0. This will only happen once because it is outside the forever loop. If the object is touching the sprite named “Player 1” then “P1 Score” will increase by 1 and the chomp sound will play. The object will go to a random position and then moved to 180 on the y-axis. This will happen forever until the red flag is pressed or the game ends.