LESSON 9:

CATCH THE APPLES!



SCRATCH WORLD



Mina was exploring the magical land when she noticed something surprising. Red apples were falling from the sky!

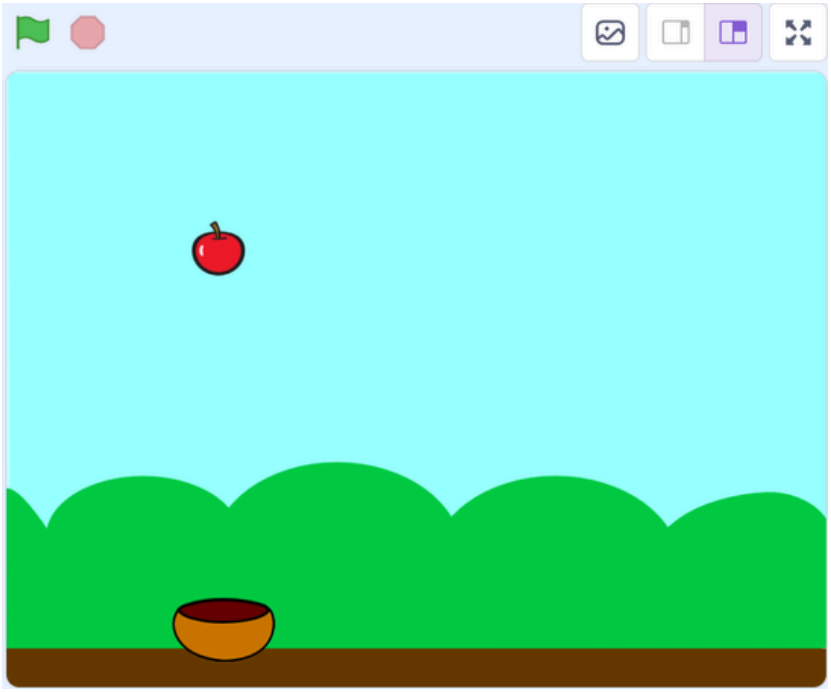




Let's Create Our Game!

Step 1: Choose Your Sprites

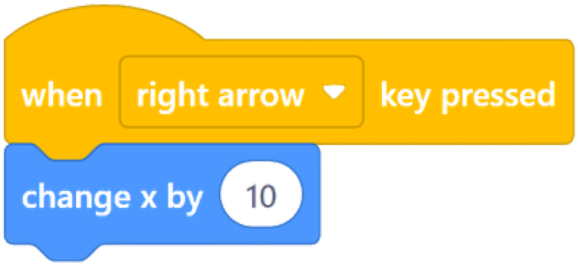
- Choose an Apple sprite from the Sprite Library.
- Choose a Basket sprite to catch the apples.
- Also add backdrop from the backdrop library.
- Resize the sprites if needed.
- Place the basket near the bottom of the Stage and the apple near the top.



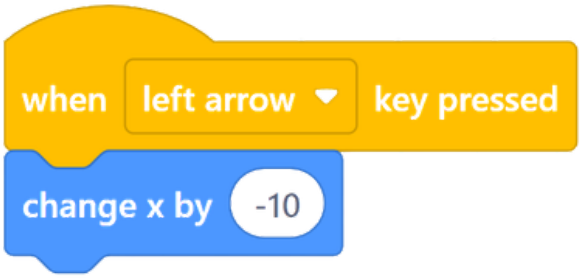
Step 2: Make the Basket Move!

Let's use the arrow keys to control the basket. Select basket in sprite pane to write its code

Move right



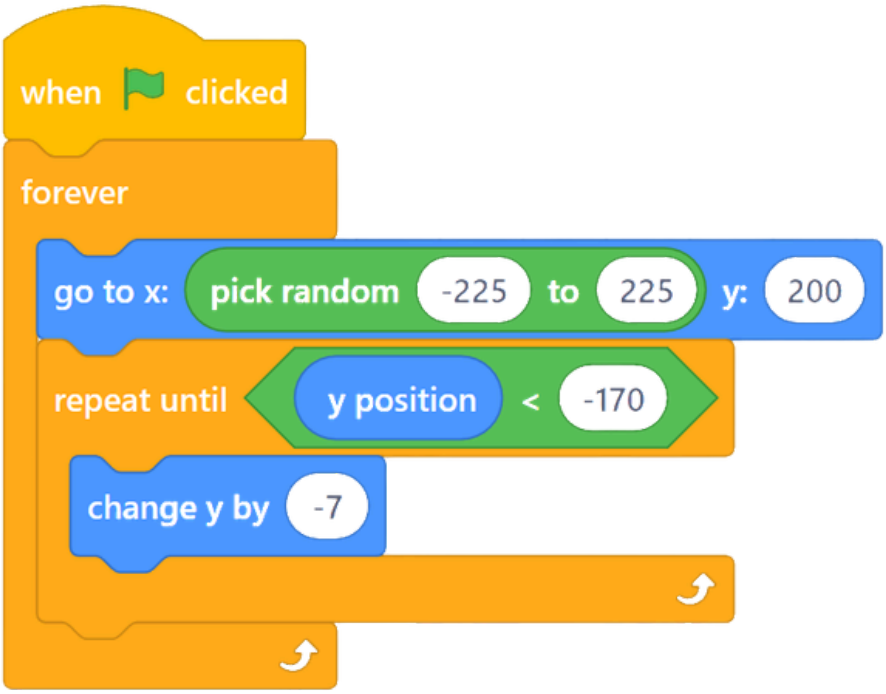
Move Down



Step 3: Make the Apple Fall and Return!

Let's make the apple fall from the sky. When it reaches the bottom, it should return to the top and fall again.

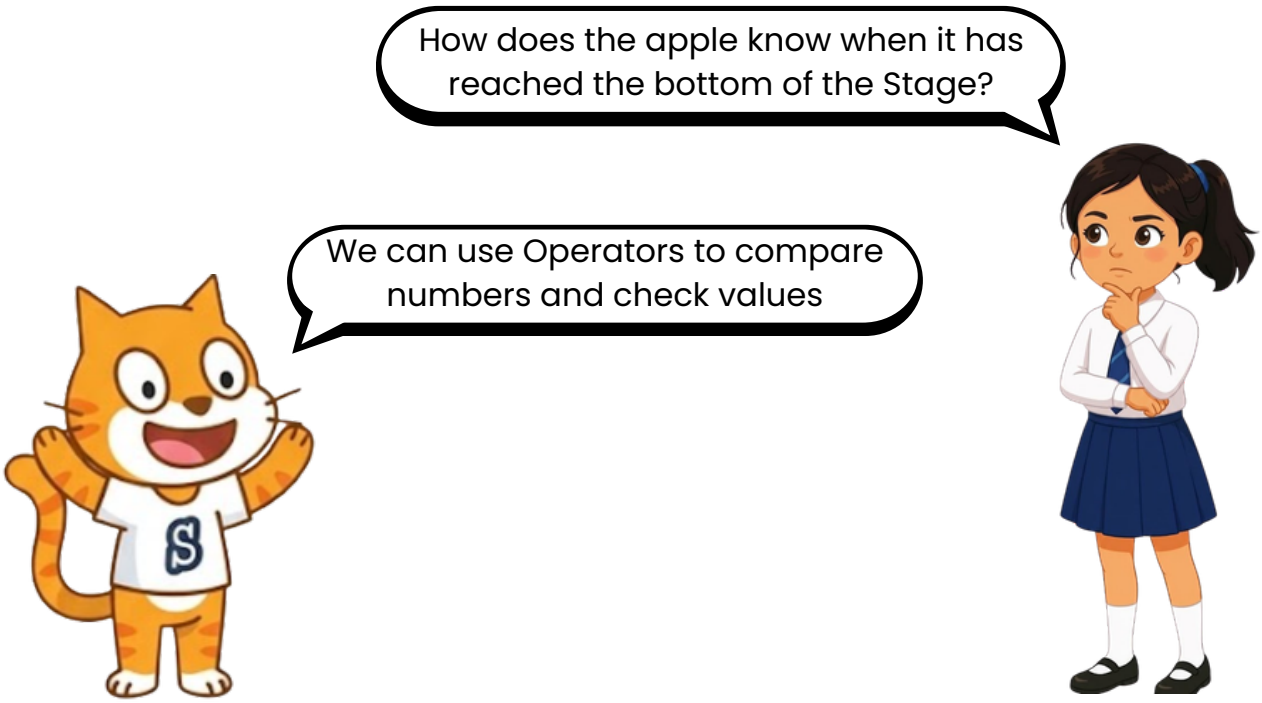
select apple sprite in sprite pane and write code



What just happened?

The apple will fall until its Y position becomes less than -170. Then, the loop will stop, and the apple will return to the top to fall again.

Step 4: Let's Learn About Operators!



Operators are blocks in Scratch that help us perform calculations and compare values.

Let's explore some useful Operators!

- **Greater than (›)** – Checks whether one number is greater than another.
- **Less than (‹)** – Checks whether one number is smaller than another.
- **Equals (=)** – Checks whether two values are equal.

How Do We Use an Operator in Our Game?

In Step 3, we used this condition:



The less than (‹) Operator checks whether the apple's **Y** position is below **-170**.

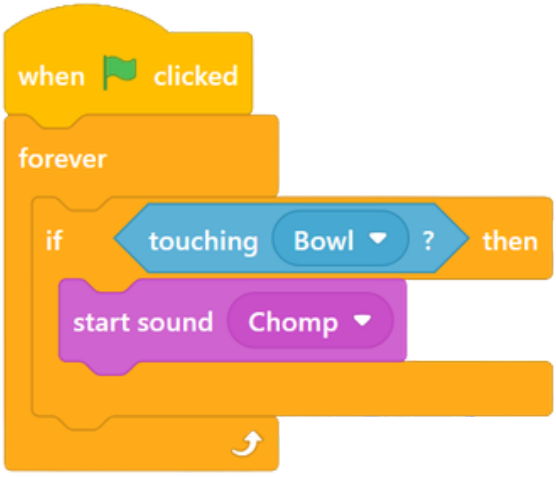
- If the condition is false, the apple keeps falling.
- If the condition becomes true, the apple has reached the bottom, and the Repeat until loop stops.

Try it yourself: What do you think will happen if you change -170 to -100? Will the apple fall as far as before?

Step 5: Play a Sound When the Apple Is Caught!

Let's make the apple play a sound when it touches the basket.

In the **Apple sprite,** add this code:



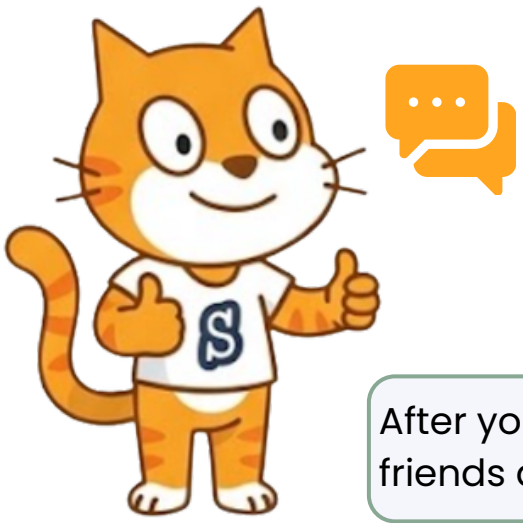
Challenge: Create Your Own Fruit Adventure

- Can you make the apple fall faster by changing the value in Change y by (-5)?
- Can you make the apple return to the top when its Y position is less than -100 instead of -170?
- Can you use the Equals (=) Operator to check whether the apple's Y position is exactly 0?
- Can you use the Greater than (>) Operator to check whether the apple's Y position is greater than 100?

Today we explored



- How to move a basket using the arrow keys.
- How to make an apple fall and return to the top using loops.
- What Operators are
- How to use the less than Operator to control when the apple stops falling.
- How to detect when two sprites touch.
- How to play a sound when the apple touches the basket.



After you reflect on these questions, talk to your friends and share your thoughts.