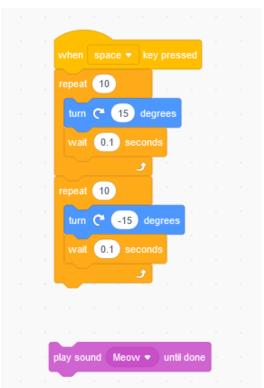
1. Design a Scratch application to empty coke bottle.

Solution - The application will simulate an animated Coke bottle being emptied. It will use sprites and coding blocks in Scratch to create the illusion of the liquid pouring out of the bottle and the bottle becoming empty.

Code



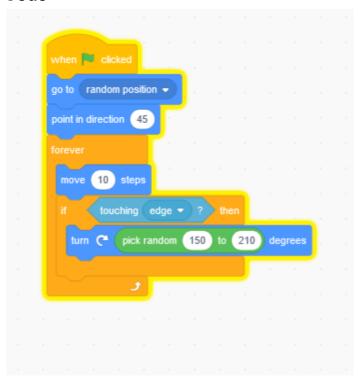
Output-



2. Design a Scratch application to bounce a ball.

Solution - The application will simulate a ball bouncing within a defined area. When the ball hits the edge of the screen or a specified object (like a paddle), it will bounce back at an appropriate angle.

Code



Output-



3. Design a Scratch application to move the object from one location to another.

Solution - The application will feature an object (sprite) that can be moved to a specific target location using keyboard inputs, mouse clicks, or automatic animations.

Code-

```
when 📜 clicked
go to random position •
   change y by 10
   change y by -10
   change x by 10
    change x by (-10
        I have reached the Target
```



4. Design a Scratch application to display fade-in and fade-out applications.

Solution - The application will display a sprite that gradually appears (fade-in) and disappears (fade-out) using the "ghost" effect in Scratch.

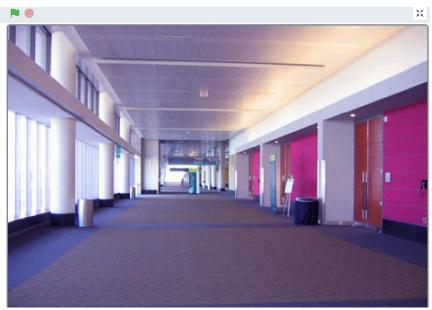
Code - 1) Fade-In Effect:



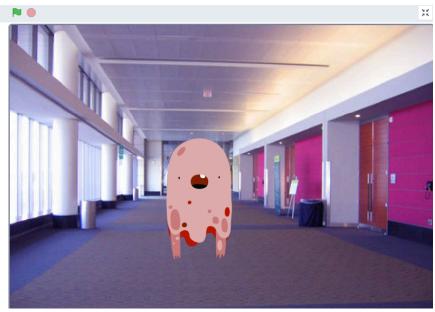
2) Fade-out Effect:



1) Fade-In Effect:



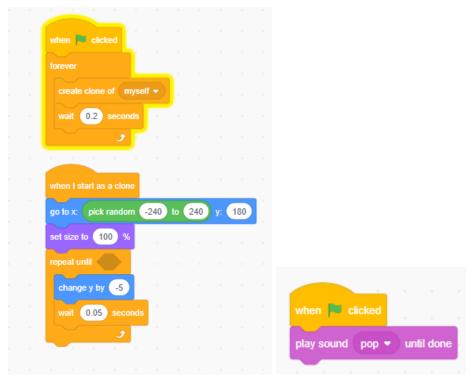
2) Fade-out Effect:



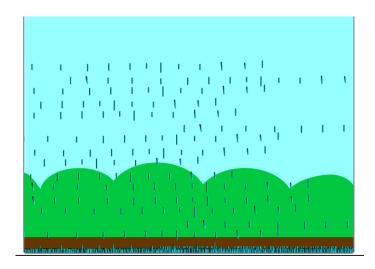
1. Design a Scratch application for Rainfall.

Solution -

Code -

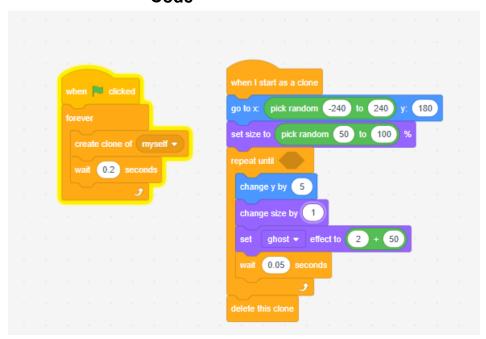


Output-

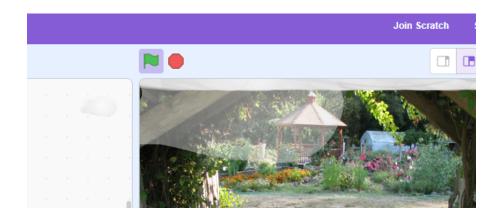


2. Design a Scratch application for Smoke effect. Solution -

Code

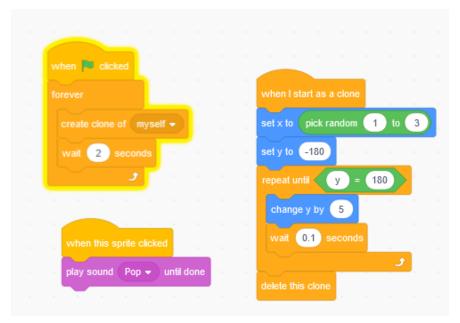


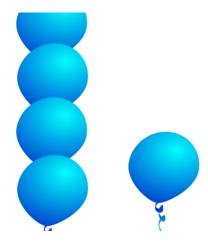
Output-



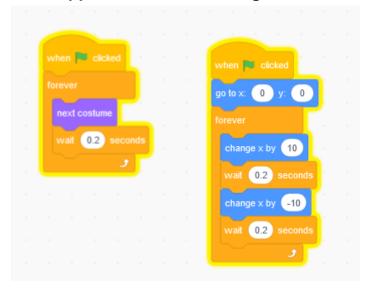
3. Design a Scratch application for Bubble effect. Solution -

Code-





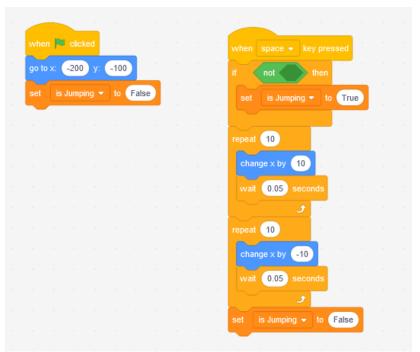
4. Design a Scratch application on a dancing doll.



Solution - Code -



5. Design a Scratch application on Sparrow Jumping Game. Solution -.



6. Design a Scratch application on Catching Apple in a Bowl.

```
when clicked

go to x: 0 y: -140

forever

if key left arrow → pressed? then

change x by -10

if key right arrow → pressed? then

change x by 10
```

```
when clicked

forever

set x to pick random -240 to 240

set y to 180

repeat until y < -140

when clicked

set Score to 0

set Lives to 0

if touching Bowl ? then

change Score by 1

else

change Lives by -1
```

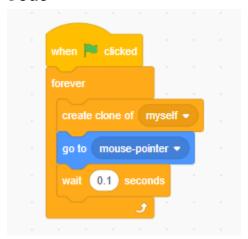
Score 0
Lives 0



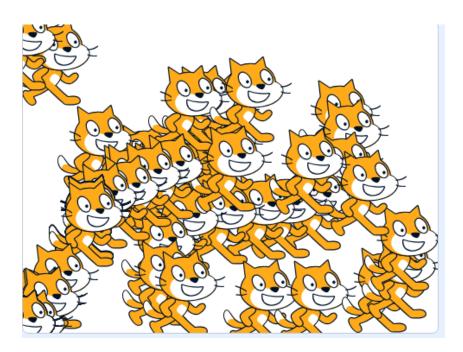


1. Design a Scratch application to make a Mouse Trail. Solution -

Code -



Output-



2. Design a Scratch application to make a Virtual Town. Solution -

```
when so clicked

forever

If key right arrow pressed? then

change x by 10

If key up arrow pressed? then

change y by 10

If key down arrow pressed? then

change y by 10
```



3. Design a Scratch application to make a Virtual Pet. Solution -

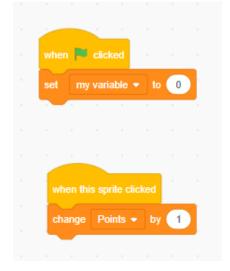
Code-



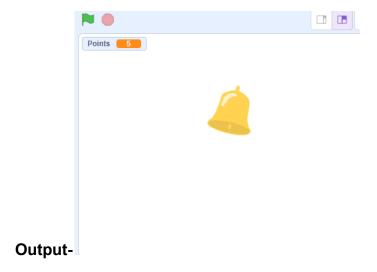
Output-



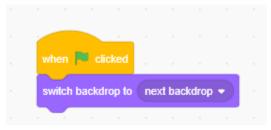
4. Design a Scratch application to make Clicker Game.



Solution - Code -



5. Design a Scratch application to apply Day and Night mode. Solution -.



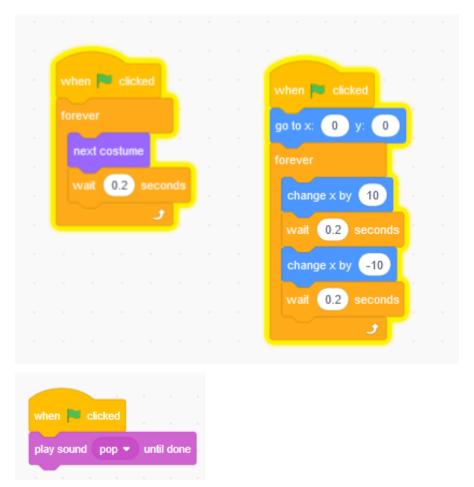




1. Design a Scratch application to make a Dancing Girl and <u>add</u> background Music to it.

Solution - Add music by yourself.

Code -



Output-





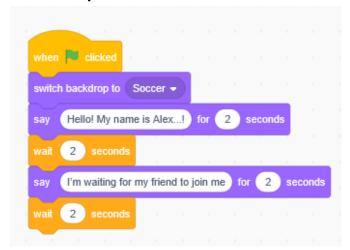
2. Design a Scratch application to make a Story with two Sprites and two Backgrounds.

Solution -

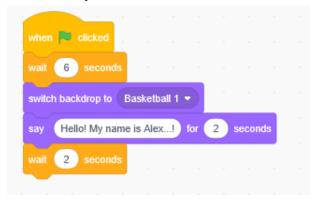
• Add 2 characters from the sprite library.

• Add 2 backdrops from the library.

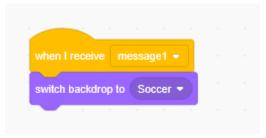
Code for sprite - 1

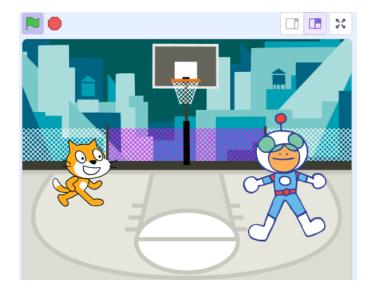


Code for sprite - 2



Code for Backdrop - 2



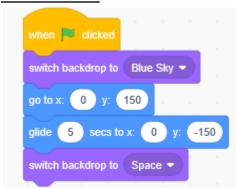


3. Design a Scratch application to Moonrise after sunset. Solution -

Code-

- Add 2 characters from the sprite library.(Sun & Moon)
- Add 2 backdrops from the library (Sunny & Night with stars)

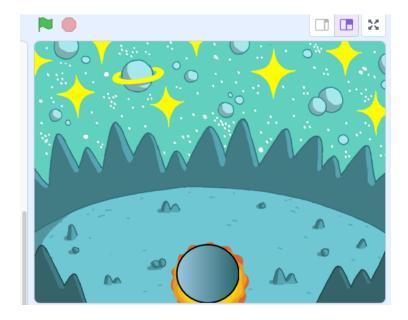
Code for sun



Code for Moon

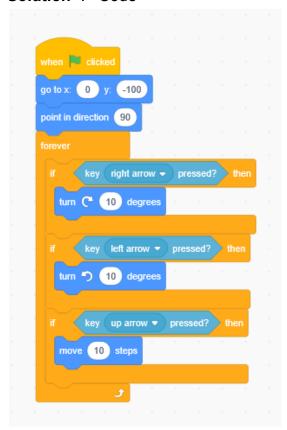


Output-



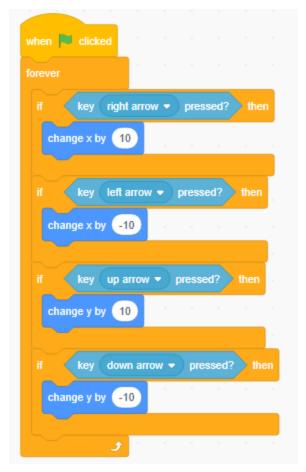
4. Develop a Scratch application to Run a race. Solution - Code - Output-

5. Develop a Scratch application to make a Car Steering Simulation. Solution -. Code-





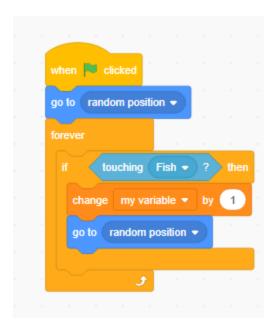
- 6. Develop a Scratch application to make a Snake Game.
- 7. Develop a Scratch application to make Fish-Shark Game. Solution-Code for Fish-



Code for Shark-



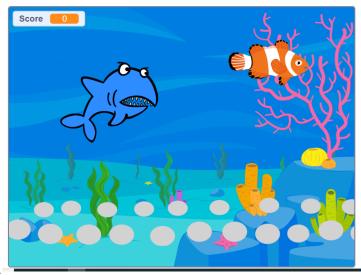
Code for Bubble-



Code for Game Over/Backdrop-



Output -



8. Design a Scratch application to add Audio and Video. Solution -

