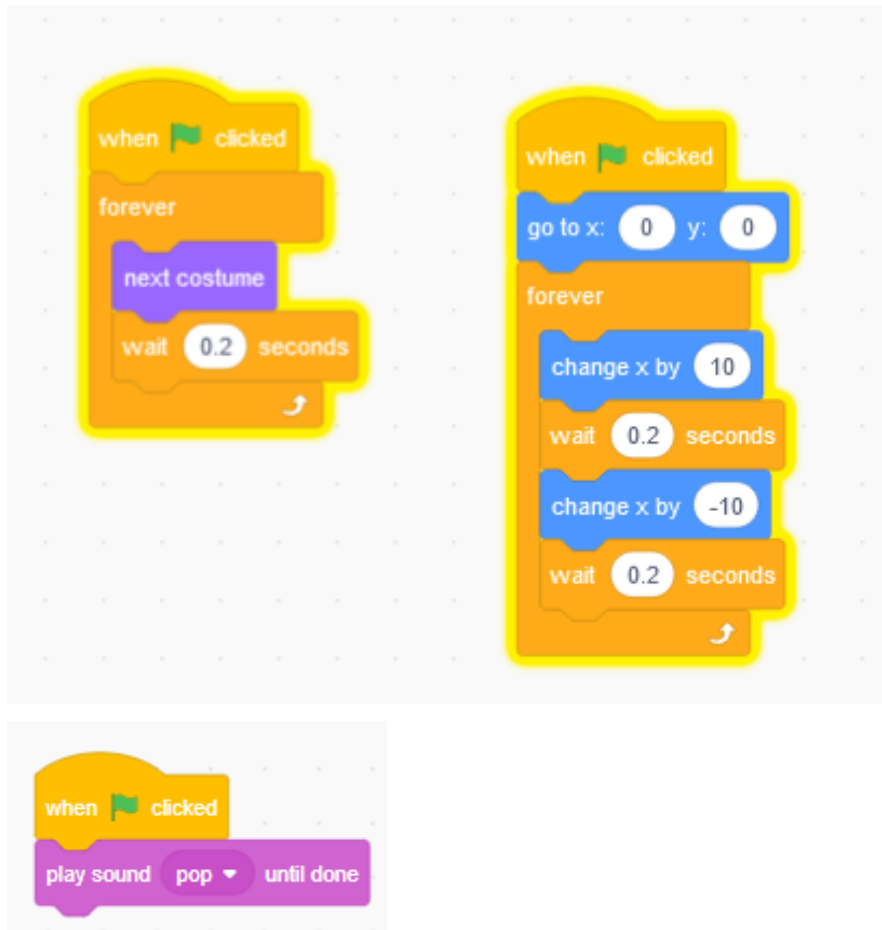1. **Design a Scratch application to make a Dancing Girl and <u>add background Music to it.</u>**

Solution - Add music by yourself.

Code -

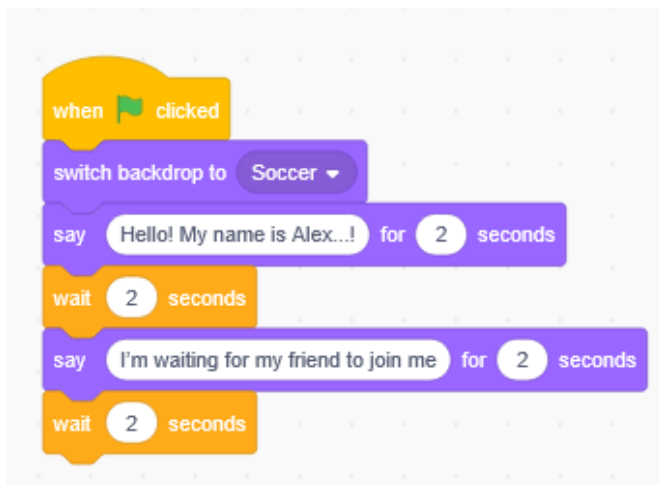

Output-

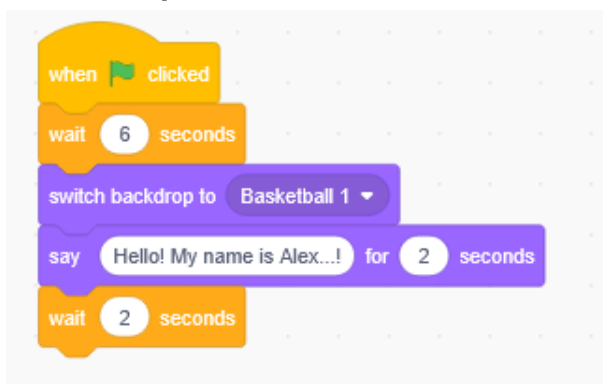2. **Design a Scratch application to make a Story with two Sprites and two Backgrounds.**

Solution -

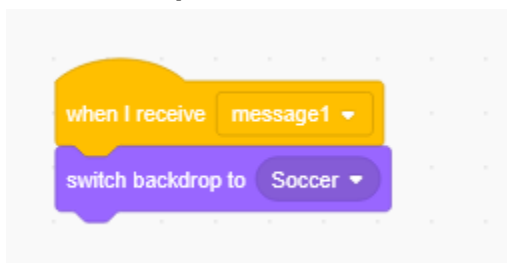- Add 2 characters from the sprite library.

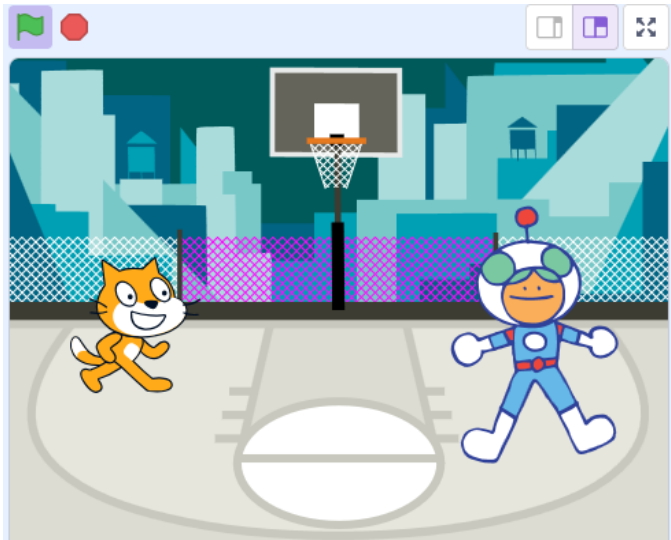● Add 2 backdrops from the library.

Code for sprite - 1

```
when [flag] clicked
switch backdrop to Soccer
say Hello! My name is Alex...! for 2 seconds
wait 2 seconds
say I'm waiting for my friend to join me for 2 seconds
wait 2 seconds
```

Code for sprite - 2

```
when [flag] clicked
wait 6 seconds
switch backdrop to Basketball 1
say Hello! My name is Alex...! for 2 seconds
wait 2 seconds
```

Code for Backdrop - 2

```
when I receive message1
switch backdrop to Soccer
```

Output-

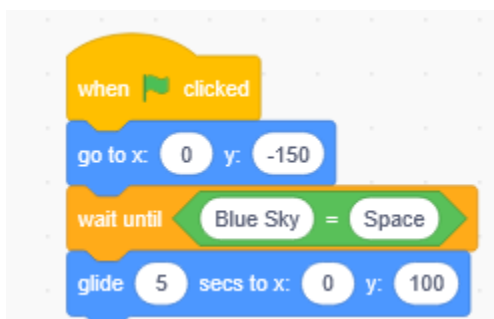**3. Design a Scratch application to Moonrise after sunset.**

Solution -

Code-

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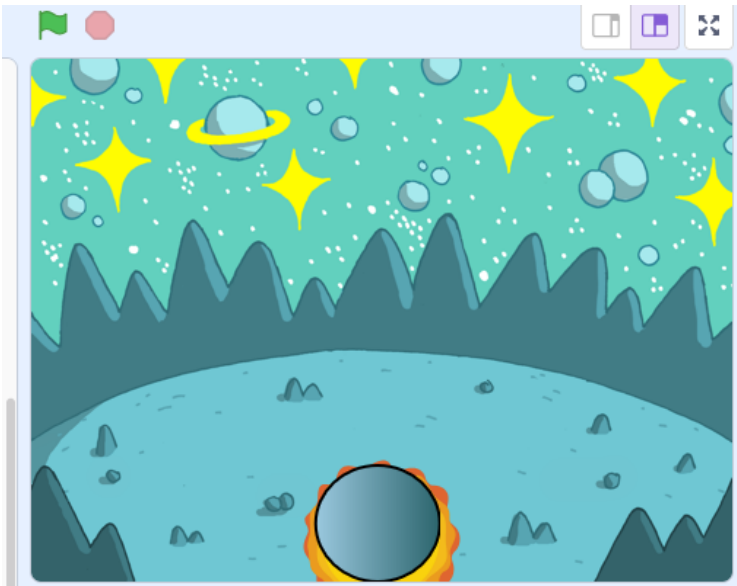- Add 2 backdrops from the library (Sunny & Night with stars)

<u>**Code for sun**</u>

```
when [flag] clicked
switch backdrop to Blue Sky
go to x: 0 y: 150
glide 5 secs to x: 0 y: -150
switch backdrop to Space
```

<u>**Code for Moon**</u>

```
when [flag] clicked
go to x: 0 y: -150
wait until < Blue Sky = Space >
glide 5 secs to x: 0 y: 100
```
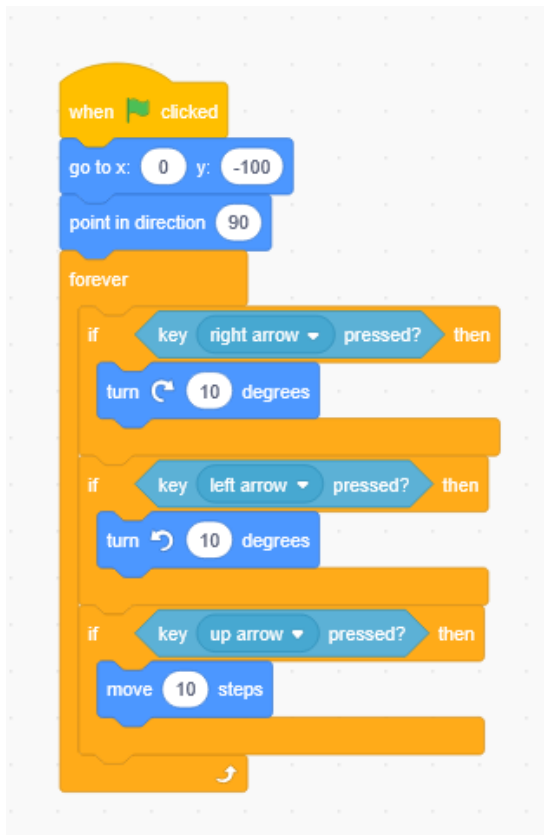
Output-

4. Develop a Scratch application to Run a race.

Solution - Code -
Output-

5. Develop a Scratch application to make a Car Steering Simulation.

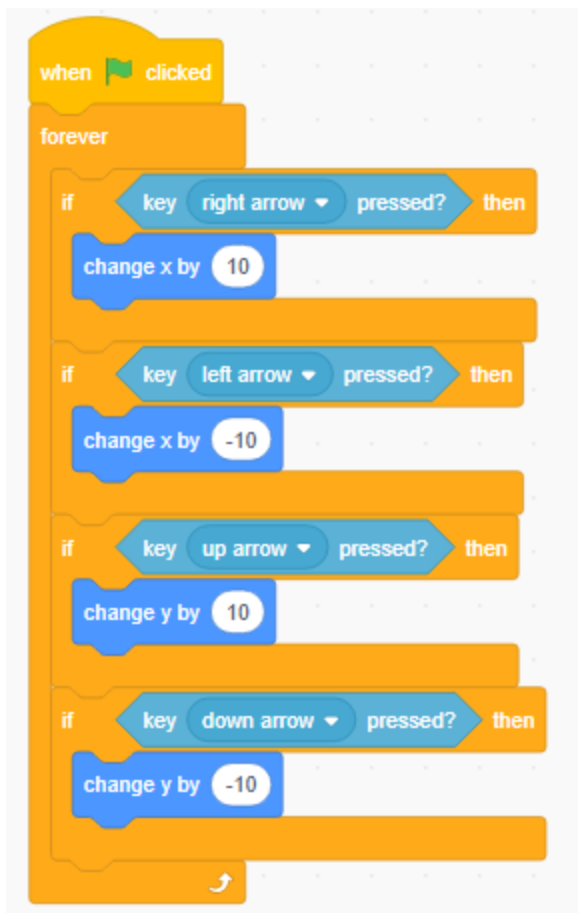**Solution -. Code-**

Output-

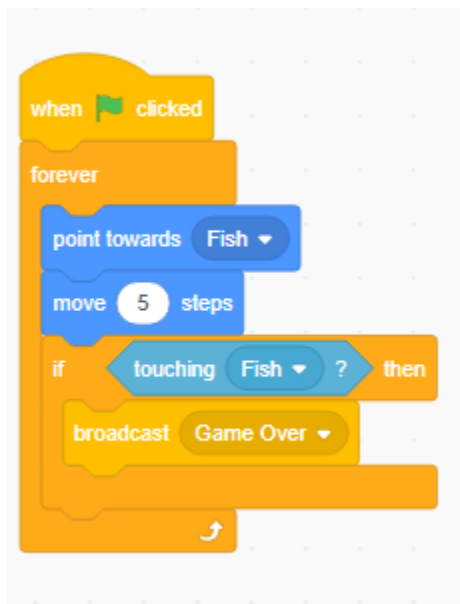6. **Develop a Scratch application to make a Snake Game.**

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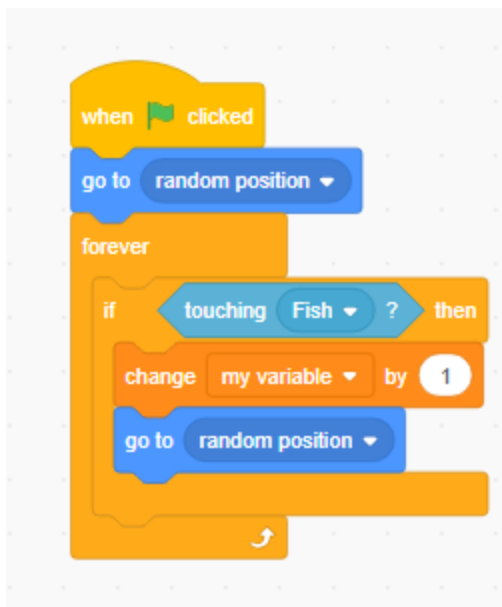**Solution-**
Code for Fish-

```
when [flag] clicked
forever
  if < key (right arrow ▼) pressed? > then
    change x by (10)
  if < key (left 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)
```

Code for Shark-

```
when [flag] clicked
forever
  point towards (Fish ▼)
  move (5) steps
  if < touching (Fish ▼) ? > then
    broadcast (Game Over ▼)
```

Code for Bubble-

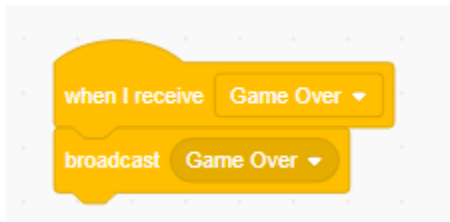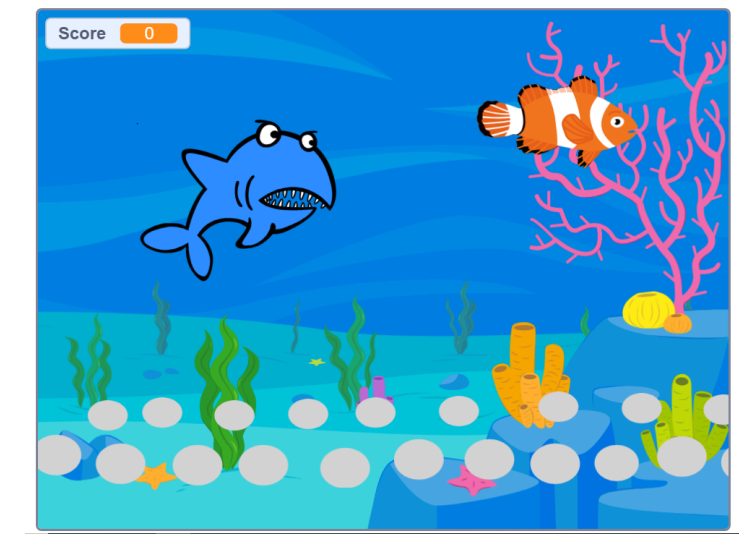## Code for Game Over/Backdrop-

Output -

Score   0
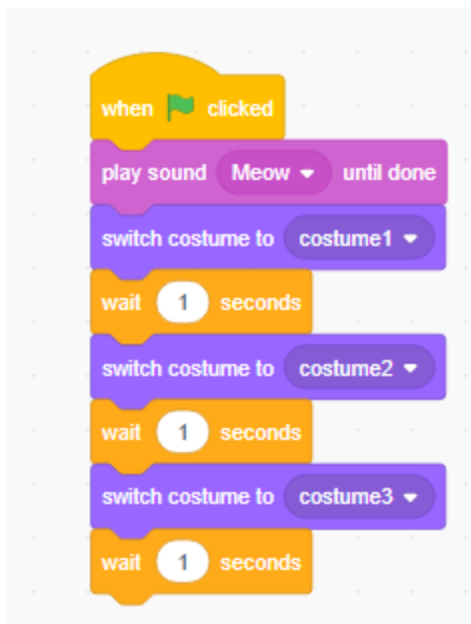
8. **Design a Scratch application to add Audio and Video.**

Solution -

Output-