

Practical no 1

AIM: Create a 2D UFO Game using the Unity Engine.

Code:**playerController.cs**

```
using System.Collections;
using UnityEngine;
using System.Collections.Generic;
using UnityEngine.UI;
public class PlayerController : MonoBehaviour {
    public float speed;
    public Text countText;
    public Text winText;
    private Rigidbody2D rb2d;
    private int count;
    void Start()
    {
        rb2d = GetComponent<Rigidbody2D>();
        count = 0;
        winText.text = "";
        SetCountText ();
    }
    void FixedUpdate()
    {
        float moveHorizontal = Input.GetAxis("Horizontal");
        float moveVertical = Input.GetAxis("Vertical");
        Vector2 movement = new Vector2(moveHorizontal, moveVertical);
        rb2d.AddForce(movement * speed);
    }
    void OnTriggerEnter2D(Collider2D other)
    {
        if (other.gameObject.CompareTag ("PickUp"))
        {
            other.gameObject.SetActive (false);
            count = count + 1;
            SetCountText ();
        }
    }
}
```

```
}  
}  
void SetCountText()  
{  
    countText.text="Count: " + count.ToString();  
    if (count >= 12) {  
        winText.text = "You Win!!!" ;  
    }  
}  
}
```

CameraController.cs

```
using System.Collections;  
using System.Collections.Generic;  
using UnityEngine;  
public class CameraController : MonoBehaviour {  
    public GameObject player ;  
    private Vector3 offset;  
    //us this for initialization  
    void Start()  
    {  
        offset = transform.position - player.transform.position;  
    }  
    //update is called once per frame  
    void LateUpdate()  
    {  
        transform.position=player.transform.position+offset;  
    }  
}
```

Rotator.cs

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;
public class Rotator : MonoBehaviour {
// Update is called once per frame
void Update ()
{
transform.Rotate (new Vector3 (0, 0, 45) * Time.deltaTime);
}
}
```

output



