**Practical No:7**

**Aim: Design 2D(Object) & implement various unity functionality.**

**Code 1(Motion of plane):**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

public class plain1 : MonoBehaviour

{private int score = 0;

Transform t;

Vector2 v;

public float speed = 3.0f;

void Start()

{

t = gameObject.transform;

v = new Vector2(t.position.x, t.position.y);

}

void Update()

{ float mx = Input.GetAxis("Horizontal");

float my = Input.GetAxis("Vertical");

if (mx < 0.00f)

{ v.x = v.x - speed;

}

else if (mx > 0.00f)

{v.x = v.x + speed;

}

if (my < 0.00f)

{v.y = v.y - speed;

}

else if (my > 0.00f)

{

v.y = v.y + speed;

}

if(mx!=0 || my!=0)

t.position = v;

}

public void OnTriggerEnter2D(Collider2D other)

{if (other.CompareTag("k"))

{Debug.Log("maday Maday:your score is" + score);

DestroyObject(gameObject);

}

else

{score = score + 1;

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Debug.Log("maday Maday:your score is" + score);

Destroy(other.gameObject);

}

}

}

**Code 2(Motion of fire):**

using System.Collections;

using System.Collections.Generic;

using UnityEngine;

public class fire : MonoBehaviour

{

private float RotateSpeed = 5.9f;

private float Radius = 1.0f;

private Vector2 \_centre;

private float \_angle;

private void Start()

{

\_centre = transform.position;

}

private void Update()

{

\_angle += RotateSpeed \* Time.deltaTime;

var offset = new Vector2(Mathf.Sin(\_angle), Mathf.Cos(\_angle)) \* Radius;

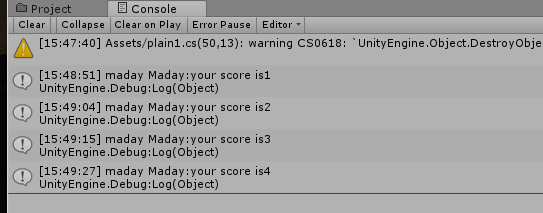
transform.position = \_centre + offset;

}

}

**Output:**

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