```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;
public class FloorGen: MonoBehaviour
  public Transform floor;
  public Transform obstacle;
  float speed;
  float rate;
 float genTime;
  float moveTime;
  float rateIncrease;
  GameObject player;
  public int score;
  GameObject lastBlock;
  bool alive;
  // Start is called before the first frame update
  void Start()
  {
    alive = true;
    SetUp();
  }
  // Update is called once per frame
  void FixedUpdate()
  {
    if (alive)
      score += 1;
      transform.GetChild(0).GetComponent<Text>().text = score.ToString();
      genTime += Time.deltaTime;
      moveTime += Time.deltaTime;
      rateIncrease += Time.deltaTime;
      if (genTime >= rate)
        AddBlocks();
        genTime = 0;
```

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}
    if (moveTime >= 10)
      int newPos = Random.Range(-3, 3);
      Vector3 height = transform.position;
      height.y = newPos;
      transform.position = height;
      moveTime = 0;
    }
    if (rateIncrease >= 5)
      speed += .2f;
      rate = 1 / (speed + 1);
      rateIncrease = 0;
    }
    MoveFloor();
    CheckGameOver();
  } else
  {
    if (Input.GetKey(KeyCode.R))
      SetUp();
 }
private void SetUp()
 speed = 2;
  rate = 1/(speed + 1);
  genTime = 0;
  moveTime = 0;
  rateIncrease = 0;
  score = 0;
  player = GameObject.Find("Player");
  player.transform.position = new Vector3(-6, 0, 0);
  if (!alive)
```

}

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{
      GameObject[] floorList;
      floorList = GameObject.FindGameObjectsWithTag("Floor");
      foreach (GameObject piece in floorList)
        Destroy(piece);
      }
      alive = true;
      player.GetComponent<PlayerControl>().collided = false;
      transform.GetChild(0).GetChild(1).GetComponent<Text>().text = " ";
    }
    for (int i = -11; i < 14; i++)
      Vector3 pos = new Vector3(i, -1, 0);
      Transform piece = Instantiate(floor, pos, Quaternion.identity); // Generate block
      lastBlock = piece.gameObject;
    }
  }
  private void CheckGameOver()
    if (player.GetComponent<PlayerControl>().collided || player.transform.position.y < -11 ||
transform.position.x < -12)
    {
      alive = false;
      transform.GetChild(0).GetChild(1).GetComponent<Text>().text = "Game Over";
    }
  }
  private void MoveFloor()
    GameObject[] floorList;
    floorList = GameObject.FindGameObjectsWithTag("Floor");
    foreach (GameObject piece in floorList)
      piece.transform.Translate(Vector3.left * (Time.deltaTime * speed));
      if (piece.transform.position.x < -15)
        Destroy(piece);
```

```
}
}
private void AddBlocks()
  Vector3 pos = lastBlock.transform.position; // Relative to last block
  pos.x = lastBlock.transform.position.x + 1; // Move back 1 space
  pos.y = transform.position.y;
  Transform floorPiece = Instantiate(floor, pos, Quaternion.identity); // Generate block
  GameObject floorObject = floorPiece.gameObject; // Get game object
  floorObject.GetComponent<FloorMovement>().speed = speed; // Set Speed
  lastBlock = floorObject; // Set last block
  int obs = Random.Range(0, 100);
  if (obs >= 10 \&\& obs < 18)
    Vector3 upOne = pos;
    upOne.y += 1;
    Instantiate(obstacle, upOne, Quaternion.identity); // Generate block
  }
  else if (obs > 93)
    Vector3 upTwo = pos;
    upTwo.y += 2.5f;
    Instantiate(obstacle, upTwo, Quaternion.identity); // Generate block
  }
}
```