

1 コリントゲームを作ろう

Animation 用のスクリプト

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class SmartBallScript : MonoBehaviour {
    float power = 0f; //ボールを打つ時の強さ
    GameObject[] cubes = new GameObject[5]; //障害物の GameObject を保管する
    Vector3[] moves = new Vector3[5]; //位置を取得
    // Use this for initialization
    void Start () {
        moves[0] = new Vector3(0f, 1f, 0f);
        moves[1] = new Vector3(-3f, 1f, 5f);
        moves[2] = new Vector3(3f, 1f, 5f);
        moves[3] = new Vector3(-3f, 1f, -3f);
        moves[4] = new Vector3(3f, 1f, -3f);
        //障害物を動かす
        for(int i = 0; i < 5; i++){
            cubes[i] = GameObject.Find("BoardCube" + i); //名前から Object を取得
            Vector3 move = cubes[i].transform.position;
            //アニメーションの設定
            AnimationClip clip = new AnimationClip(); //インスタンスの生成
            clip.legacy = true;
            Keyframe[] keysX = new Keyframe[2]; //keyframe 配列の生成
            keysX[0] = new Keyframe(0f, move.x - 3); //アニメーション開始の keyframe
            keysX[1] = new Keyframe(i + 1f, move.x + 3); //アニメーション終了の keyframe
            AnimationCurve curveX = new AnimationCurve(keysX); //アニメーションを変化させる値を設定
            clip.SetCurve("", typeof(Transform), "localPosition.x", curveX); //アニメーションを設定
            clip.wrapMode = WrapMode.PingPong; //アニメーションを設定
            Keyframe[] keysY = new Keyframe[2];
            keysY[0] = new Keyframe(0f, move.y);
            keysY[1] = new Keyframe(i + 1f, move.y);
            AnimationCurve curveY = new AnimationCurve(keysY);
            clip.SetCurve("", typeof(Transform), "localPosition.y", curveY);
            Keyframe[] keysZ = new Keyframe[2];
            keysZ[0] = new Keyframe(0f, move.z);
            keysZ[1] = new Keyframe(i + 1f, move.z);
            AnimationCurve curveZ = new AnimationCurve(keysZ);
            clip.SetCurve("", typeof(Transform), "localPosition.z", curveZ);
            cubes[i].GetComponent<Animation>().AddClip(clip, "clip1");
            cubes[i].GetComponent<Animation>().Play("clip1");
        }
    }

    // Update is called once per frame
    void Update () {
        Rigidbody rigidbody = GetComponent<Rigidbody>();
        Renderer renderer = GetComponent<Renderer>();
    }
}
```

```

    MoveCube();
    rigidbody.AddForce(0f, 0f, -1f);
    //ボールを打ち出す
    if (Input.GetKey(KeyCode.Space)){
        power += 0.01f;
        if(power > 1f){
            power = 1f;
        }
        renderer.material.color = new Color(1f, power, 0f);
    }
    if (Input.GetKeyUp(KeyCode.Space)){
        rigidbody.AddForce(new Vector3(0f, 0f, power * 2500f));
        power = 0f;
        renderer.material.color = Color.red;
    }
}

//障害物を回転させる
void MoveCube(){
    for(int i = 0; i < 5; i++){
        cubes[i].transform.Rotate(new Vector3(0f, 2.5f, 0f));
    }
}
}

```