

```
using UnityEngine;
```

```
public class EnemyController : MonoBehaviour  
{
```

```
    CharacterController controller;
```

```
    Vector3 moveDirection = Vector3.zero;
```

```
    public float gravity = 9.81f; //重力
```

```
    public float speedZ = -10; //前進方向のスピードの上限値
```

```
    public float accelerationZ = -8; //加速度
```

```
    public float deletePosY = -10f; //削除される基準のY座標値
```

```
    public bool useGravity; //重力に絞られるか空を飛ぶかのフラグ
```

```
    void Start()
```

```
    {  
        controller = GetComponent<CharacterController>();  
    }
```

```
    void Update()
```

```
    {  
        //ステージ外に落ちたら消滅  
        if(transform.position.y <= deletePosY)  
        {  
            Destroy(gameObject);  
            return;  
        }  
    }
```

```
    //徐々に加速しZ方向に常に前進させる
```

```
    float acceleratedZ = moveDirection.z + (accelerationZ * Time.deltaTime);  
    moveDirection.z = Mathf.Clamp(acceleratedZ, speedZ, 0);
```

```
    //地面を走るフラグ
```

```
    if (useGravity)  
    {  
        //重力分の力をフレーム追加  
        moveDirection.y -= gravity * Time.deltaTime;  
    }
```

```
    else //空を飛ぶフラグ
```

```
    {  
        moveDirection.y = 0;  
    }
```

```
    //移動実行
```

```
    Vector3 globalDirection = transform.TransformDirection(moveDirection);  
    controller.Move(globalDirection * Time.deltaTime);
```

```
    //移動後接地してたらY方向の速度はリセットする
```

```
    if (controller.isGrounded) moveDirection.y = 0;
```

```
    }  
}
```