

```
1 using System.Collections;
2 using System.Collections.Generic;
3 using Unity.VisualScripting;
4 using UnityEngine;
5
6 public class PlayerMovement : MonoBehaviour
7 {
8     CharacterController controller;
9     public Rigidbody rb;
10    Vector3 moveDir = Vector3.zero; //(0,0,0)
11
12    public float walk = 6f;
13    public float jump = 8f;
14    public float gravity = 20f;
15    public float run = 10f;
16
17    void Start()
18    {
19        rb = GetComponent<Rigidbody>();
20        controller = GetComponent<CharacterController>();
21    }
22
23    void Update()
24    {
25        if (controller.isGrounded)
26        {
27            if (Input.GetKey(KeyCode.LeftShift))
28            {
29                moveDir = new Vector3(Input.GetAxis("Horizontal"), 0f,
30                                     Input.GetAxis("Vertical"));
31                moveDir *= run;
32            }
33            else {
34                moveDir = new Vector3(Input.GetAxis("Horizontal"), 0f,
35                                     Input.GetAxis("Vertical"));
36                moveDir *= walk;
37            }
38            if (Input.GetButton("Jump"))
39            {
40                moveDir.y = jump;
41            }
42            moveDir.y -= gravity * Time.deltaTime;
43            controller.Move(moveDir * Time.deltaTime);
44        }
45    }
```