```
1  //Telling what libraries we can get components from.
2  using System.Collections;
3  using System.Collections.Generic;
4  using UnityEngine;
5
6  public class Player_Movement : MonoBehaviour {
7      //defining variables
8      public bool CanMove;
9
10     Rigidbody2D rbody;
11     Animator anim;
12
13
14     // Use this for initialization
15     void Start () {
16         //setting the names to the actual components inside unity.
17         rbody = GetComponent<Rigidbody2D>();
18         anim = GetComponent<Animator>();
19
20         CanMove = true;
21     }
22
23     // Update is called once per frame
24     void Update()
25     {
26         //this statement makes sure that if that the character has restricted
             movement or !CanMove, that the player's velocity is set to zero.
27         if(!CanMove)
28         {
29             rbody.velocity = Vector2.zero;
30             return;
31         }
32
33
34         //Play can only move in x and y direction cause its a 2-D game, if we
             wanted 3D we would use Vector3
35         Vector2 movement_vector = new Vector2(Input.GetAxisRaw("Horizontal"),
             Input.GetAxisRaw("Vertical"));
36
37         //An imput on keys will now change the movement vectors
38         if (movement_vector != Vector2.zero)
39         {
40             anim.SetBool("iswalking", true);
41             anim.SetFloat("input_x", movement_vector.x);
42             anim.SetFloat("input_y", movement_vector.y);
43
44         }
45         else
46         {
47             anim.SetBool("iswalking", false);
48
49         }
```

```
50
51          //actually move the rbody (player)
52          rbody.MovePosition(rbody.position + movement_vector * Time.deltaTime);
53
54
55      }
56
57
58  }
59
```