```csharp
1  using System.Collections;
2  using System.Collections.Generic;
3  using UnityEngine;
4
5  public class PlayerPlatformerMovement : MonoBehaviour
6  {
7      //Player movement script with finite state machine
8      //Player Attribute Variables
9      public bool crouch;
10     public Animator animatonset;
11     public float speed;
12     public static GameObject player;
13     public string playerface;
14     public Vector3 MoveDirection;
15     private float crouchslow;
16     //Shoot variables
17     public Transform fireplayercurrentposition1;
18     public Transform fireplayercurrentposition2;
19     public GameObject bulletPrefab;
20
21
22     // Start is called before the first frame update
23     void Start()
24     {
25         crouchslow = 3.5f;
26         crouch = false;
27         animatonset = GetComponent<Animator>();
28         speed = 5.0f;
29     }
30
31     // Update is called once per frame
32     void Update()
33     {
34
35
36         animatonset.SetBool("Crouch", false);
37         Debug.Log(animatonset.GetCurrentAnimatorStateInfo(0));
38         Vector3 playercurrentpos = transform.position;
39
40         CheckPlayerCrouch();
41
42         if (Input.GetKey("s"))
43         {
44             playerface = "forward";
45
46             if (Input.GetKey("c"))
47             {
48                 animatonset.SetBool("CrouchWalking", true);
49                 playercurrentpos.z += speed / crouchslow * Time.deltaTime;
50             }
51             else
52             {
53                 animatonset.SetBool("IsWalking", true);
```

```
54                    animatonset.SetBool("Crouch", false);
55                    animatonset.SetBool("CrouchWalking", false);
56                    playercurrentpos.z += speed * Time.deltaTime;
57                }
58
59
60            }
61            else if (Input.GetKey("w"))
62            {
63                playerface = "back";
64
65                if (Input.GetKey("c"))
66                {
67                    animatonset.SetBool("CrouchWalking", true);
68
69                    playercurrentpos.z -= speed / crouchslow * Time.deltaTime;
70                }
71                else
72                {
73                    animatonset.SetBool("IsWalking", true);
74                    animatonset.SetBool("Crouch", false);
75                    animatonset.SetBool("CrouchWalking", false);
76                    playercurrentpos.z -= speed * Time.deltaTime;
77                }
78            }
79            else if (Input.GetKey("a"))
80            {
81                playerface = "left";
82
83
84                if (Input.GetKey("c"))
85                {
86                    animatonset.SetBool("CrouchWalking", true);
87                    playercurrentpos.x += speed / crouchslow * Time.deltaTime;
88                }
89                else
90                {
91                    animatonset.SetBool("IsWalking", true);
92                    animatonset.SetBool("Crouch", false);
93                    animatonset.SetBool("CrouchWalking", false);
94                    playercurrentpos.x += speed * Time.deltaTime;
95                }
96
97            }
98            else if (Input.GetKey("d"))
99            {
100                playerface = "right";
101
102                if (Input.GetKey("c"))
103                {
104                    animatonset.SetBool("CrouchWalking", true);
105                    playercurrentpos.x -= speed / crouchslow * Time.deltaTime;
106                }
```

```
107                else
108                {
109                    animatonset.SetBool("IsWalking", true);
110                    animatonset.SetBool("Crouch", false);
111                    animatonset.SetBool("CrouchWalking", false);
112                    playercurrentpos.x -= speed * Time.deltaTime;
113                }
114            }
115            else
116            {
117                animatonset.SetBool("CrouchWalking", false);
118                animatonset.SetBool("IsWalking", false);
119
120            }
121
122        CheckPlayerCrouch();
123        transform.position = playercurrentpos;
124        RotatePlayerAnimation();
125        CheckPlayerShot();
126
127
128    }
129
130
131
132
133    void Shot()
134    {
135        if (Input.GetKey("c"))
136        {
137            Instantiate(bulletPrefab, fireplayercurrentposition2.position,  ⮐
                  fireplayercurrentposition2.rotation);
138        }
139        else
140        {
141            Instantiate(bulletPrefab, fireplayercurrentposition1.position,  ⮐
                  fireplayercurrentposition1.rotation);
142        }
143
144    }
145
146
147    void RotatePlayerAnimation()
148    {
149        if (playerface == "left")
150        {
151
152            //Rotates The player animaton
153            animatonset.rootRotation = Quaternion.Euler(new Vector3(0, 90,  ⮐
                  0));
154            //Rotates the Player object
155            transform.rotation = Quaternion.Euler(new Vector3(0, 90, 0));
156            //player.transform.eulerAngles = new Vector3              ⮐
```

```csharp
                        (player.transform.eulerAngles.x,                         ⮐
                        player.transform.eulerAngles.y-180,                      ⮐
                        player.transform.eulerAngles.z);
157             }
158         if (playerface == "right")
159         {
160             //Rotates The player animaton
161             animatonset.rootRotation = Quaternion.Euler(new Vector3(0, 270,  ⮐
                  0));
162             //Rotates the Player object
163             transform.rotation = Quaternion.Euler(new Vector3(0, 270, 0));
164
165         }
166         if (playerface == "forward")
167         {
168             //Rotates The player animaton
169             animatonset.rootRotation = Quaternion.Euler(new Vector3(0, 360,  ⮐
                  0));
170             //Rotates the Player object
171             transform.rotation = Quaternion.Euler(new Vector3(0, 360, 0));
172
173         }
174         if (playerface == "back")
175         {
176             //Rotates The player animaton
177             animatonset.rootRotation = Quaternion.Euler(new Vector3(0, 180,  ⮐
                  0));
178             //Rotates the Player object
179             transform.rotation = Quaternion.Euler(new Vector3(0, 180, 0));
180
181         }
182     }
183
184     void CheckPlayerCrouch()
185     {
186         if (Input.GetKey("c"))
187         {
188             animatonset.SetBool("Crouch", true);
189         }
190     }
191
192     void CheckPlayerShot()
193     {
194         if (Input.GetButtonDown("Fire1"))
195         {
196             Shot();
197         }
198     }
199 }
200
```