**Tutorial 001 - (Player Movement with Keys)**

1. Create a Cube and a plane in the 3d viewport the plane will be the ground and the cube will be the object that you will be moving.
2. Create a C# script called Movement
3. In the public class Movement section create a public float variable called speed.  
   This will be the speed of the cube.  
   ***public float speed;***
4. In the void update section type ***float horizontal = Input.GetAxisRaw(“Horizontal”);***This is for when you press a key to make the cube move left and right.  
     
   Copy and paste the line of code you just typedand replace the first horizontal with vertical and the next Horizontal text with Vertical  
     
   ***float horizontal = Input.GetAxisRaw(“Horizontal”);  
   float vertical = Input.GetAxisRaw(“Vertical”);***
5. Under the line of code, you just typed, type ***Vector3 = new Vector3 (horizontal, 0, vertical);***  
   A Vector3 is points in 3D space and the horizontal, 0 and vertical represent the x, y, and z, meaning that the cube will move horizontal in the x axis, it wont move in the y, and it will move vertically in the z.
6. Next under the previous line of code type ***gameobject.transform.Translate(direction.normalized \* Time.deltaTime \* speed);***gameobject.transform.Translate is the gameobject which in this case is the cube and the transform is the movement , rotation, and scale of the cube.  
     
   direction.normaized is a type of movement.  
     
   Time.deltaTime is making the movement not dependent on the framefrate of the computer, and the \* speed is to control how fast it is.
7. Save the code.
8. Drag the code on to the cube.
9. Set a movement speed and press play.

**Tutorial 002 - (Camera Follows Player)**

1. Create a public Transform called Target.

**public Transform target;**

1. Create void called LateUpdate and in that section and write

***Vector3 desiredPostion = target.position + offset;***

This is for the position of the camera.

1. Save the code and place the script onto the camera & in the editor drag the cube into the target section.
2. Once you have done that adjust the position of the x, y, & z to your liking.
3. Copy or remember the positions that you were happy with, click play and paste those positions in the camera script in the editor.

**Tutorial 003 - (Turret Shooting)**

1. Create a public GameObject called Projectile which will be the projectile that is fired.

2. Create a public float called shooterForce which is the speed the projectile will be fired.

3. Create a private void called Shoot.

***(private void Shoot() {})***

4. Within void Shoot, create a Vector3 called Orientation with -90 degrees on the x.

***(Vector3 orientation = new Vector3(-90, 0, 0);)***

5. Within void Shoot under the Vector3 Orientation, Create a Gameobject called arrow, instantiate it and put the Vector3 Orientation next to the Quaternion.Euler in brackets.

***(  GameObject arrow = Instantiate(Projectile, transform.position, Quaternion.Euler(orientation));)***

6. To make the arrow fire in the z-direction, under the last line of code place this.

***(arrow.GetComponent<Rigidbody>().velocity = transform.forward \* shootingForce;)***

**Tutorial 004 – (Pick Up and Place Objects)**

1. Create script called PickUp.

2. Create a 3d Cube in the hierarchy section and call it player.

3. Create an empty game object, place it on the player cube, and call it Destination.

4. Open the PickUp script and create a public transform variable called theDest.

***( public Transform theDest; )***

5. Create a void OnMouseDown section

***void OnMouseDown()***

***{***

***}***

6. Type ***GetComponent<Rigidbody>().useGravity = false;*** This turns of the Gravity of the object

7. Type ***this.transform.position = theDest.position;***

***this.transform.parent = GameObject.Find("Destination").transform;***

This moves the object to the selected position.

8. Create a void OnMouseUp.

***void OnMouseUp()***

***{***

***}***

9. Inside on that type ***this.transform.parent = null;***

10. Under that type ***GetComponent<Rigidbody>().useGravity = true;***

11. Save the script.

12. attach the PickUp scritp to all objects that you want to pick up and in the destination section on the script move the Destination gameobject in the player cube to the Destination section on the script.

13. Press the play button and click on the objects that have the PickUp script attached to them.