

2) snake movement

This is a tutorial to make the snake move

Create a new c# script

In order to make the snake move we have to declare a variable to keep track of our directions

Private Vector2

A vector has 2 floating point values in the x and y

Let's say it has a default of vector2.right automatically move us right

Private Vector2 _direction = Vector2.right

We need to assign the direction based on the input

```
private void Update()
{
    if (Input.GetKeyDown(KeyCode.W)) {
        _direction = Vector2.up;
    } else if (Input.GetKeyDown(KeyCode.S)) {
        _direction = Vector2.down;
    } else if (Input.GetKeyDown(KeyCode.A)) {
        _direction = Vector2.left;
    } else if (Input.GetKeyDown(KeyCode.D)) {
        _direction = Vector2.right;
    }
}
```

This else if statement allows the direction to stay the same without holding the buttons/keys

Now we need to create the transformation this is where the snake is given movements

```
this.transform.position = new Vector3(
    Mathf.Round(this.transform.position.x) + _direction.x,
    Mathf.Round(this.transform.position.y) + _direction.y,
    0.0f
```

This allows the snake to move as if it were being transformed in the x and y axis

Whereas Mathf.Round was needed to create a rounded whole number since the snake game requires it to be perfectly even