

Code Examples

Key Points

- A **for loop** is used for iterating through arrays, lists, or doing things multiple times.
- A **for each loop** specifically iterates through a collection of objects or values.
- While loops continuously execute until their condition is false. In a regular function, this can freeze Unity.
- In a coroutine, however, while loops are used to create mini update loops.

Code Examples

For Loop

```
1. public int[] numbers;  
2.  
3. private void Start()  
4. {  
5.     for (int i = 0; i < numbers.Length; i++)  
6.     {  
7.         Debug.Log("Element " + i + " is " + numbers[i]);  
8.     }  
9. }
```

For Each Loop

```
1. public GameObject[] objects;  
2.  
3. private void Start()  
4. {  
5.     foreach (GameObject obj in objects)  
6.     {  
7.         Debug.Log(obj.name);
```

8. }

9. }

While Loop

1. bool running = false;

2.

3. public IEnumerator Start()

4. {

5. bool running = true;

6.

7. // This happens once

8.

9. while (running)

10. {

11. // This happens every frame while running is true

12. yield return null;

13. }

14.

15. // This happens once at the end

16. }