

State the difference between while loop, for loop and do while loop.

**While loop:** The condition is evaluated **before** the loop runs. If the condition is false from the start, the loop may not execute at all.

```
let count = 0;

while (count < 5) {

  console.log(count);

  count++;

}
```

**For loop:** Useful when you know how many times you want to iterate or when iterating over a range or collection.

```
for (let i = 0; i < 5; i++) {

  console.log(i);

}
```

**Do-While loop:** The loop runs **at least once**, regardless of the condition because the check happens after the first iteration.

```
let count = 0;

do {

  console.log(count);

  count++;

} while (count < 5);
```

## What is the difference between break and continue.

### break:

- Exits the loop entirely.
- The loop stops executing as soon as break is encountered.
- Used when you want to terminate the loop based on a condition.

Example:

```
for (let i = 0; i < 10; i++) {  
  if (i === 5) {  
    break; // Exits the loop when i is 5  
  }  
  console.log(i);  
}
```

### continue:

- Skips the current iteration and proceeds with the next one.
- The loop does not stop but skips the remaining code for the current iteration.
- Used when you want to skip certain iterations based on a condition.

Example

```
for (let i = 0; i < 10; i++) {  
  if (i === 5) {  
    continue; // Skips the current iteration when i is 5  
  }  
  console.log(i);  
}
```