1. Iterates from 1 to 10 and logs each number.

```
for (let i = 1; i <= 10; i++) {
  console.log(i);
}
```

2.Iterates from 1 to 20 and uses the modulo operator to log only even numbers.

```
for (let i = 1; i <= 20; i++) {
  if (i % 2 === 0) {
    console.log(i);
  }
}
```

3.A countdown from 10 to 1 using a while loop.

```
let i = 10;
while (i >= 1) {
  console.log(i);
  i--;
}
```

4.Executes the block once before checking the condition (which is false).

```
let run = false;
do {
  console.log("Welcome!");
} while (run);
```

5. Calculates the sum of all integers from 1 to 10.

```
let sum = 0;
for (let i = 1; i <= 10; i++) {
  sum += i;
}
console.log(sum);
```

6.Loops through an array and logs both the index and the value.

```
let colors = ["Red", "Green", "Blue"];
for (let i = 0; i < colors.length; i++) {
  console.log(i, colors[i]);
```

```
}
```

7.A modern way to iterate directly over the values of an array.

```
let names = ["Alice", "Bob", "Charlie"];
for (let name of names) {
  console.log(name);
}
```

8.Uses the break statement to stop the loop entirely when a specific condition (n === 5) is met.

```
let nums = [1, 2, 3, 5, 6, 7];
for (let n of nums) {
  if (n === 5) break;
  console.log(n);
}
```

9.Uses the continue statement to skip the current iteration (odd numbers) and move to the next one.

```
for (let i = 1; i <= 10; i++) {
  if (i % 2 !== 0) continue;
  console.log(i);
}
```

10.A simple loop that logs the multiples of 5 from 1 to 10.

```
for (let i = 1; i <= 10; i++) {
  console.log(5 * i);
}
```

11.Iterates through an array to find and store the highest number.

```
let nums = [10, 5, 8, 22, 13];
let max = nums[0];
for (let num of nums) {
  if (num > max) {
    max = num;
  }
}
```

```
console.log(max);
```