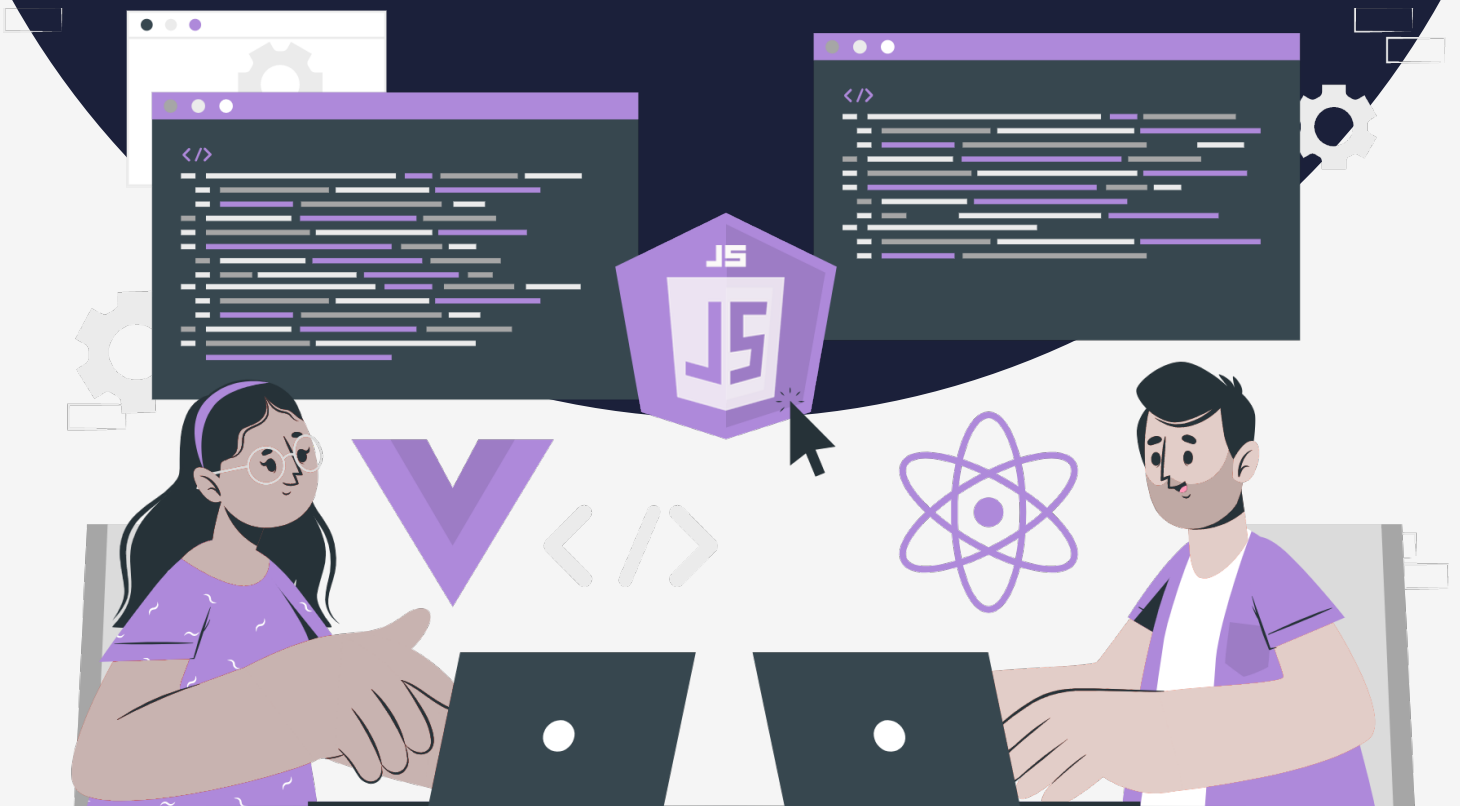


Lesson:

While and Do-while loop



List of content:

1. While loop
2. Example
3. Do while loop
4. Example

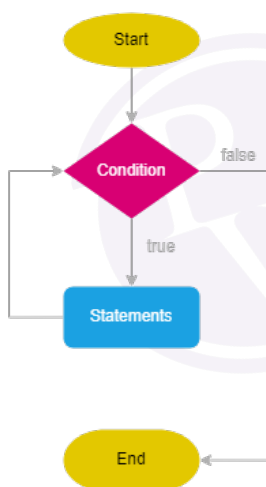
Loops are used in programming to repeatedly run a block of code. A loop can be used, for instance, to repeat a message hundred times. It's only a simple illustration; loops may be used to accomplish much more.

While loop

Syntax :

```
while (condition) {
    // body of loop
}
```

- The parentheses has the condition that is to be evaluated by a while loop ().
- The while loop's code is run if the condition evaluates to true.
- The condition is assessed again.
- until the condition is false, this process keeps going.
- The loop ends when the condition is evaluated as false.



Example 1: To print numbers from 1 to 10 using while loop

```
let i = 1, n = 10;
while (i ≤ n)
{
    console.log(i);
    i=i+1;
}
```

Output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
[Running] node "c:\Users\ACER\Desktop\First P
1
2
3
4
5
6
7
8
9
10

[Done] exited with code=0 in 0.102 seconds

```

Example 2 : To print numbers from 10 to 1 in decreasing order.

```

let i = 1, n = 10;
while (n ≥ i){
    console.log(n);
    n=n-1;
}

```

Output:

```

[Running] node "c:\Users\ACER\Desktop\First Progr
10
9
8
7
6
5
4
3
2
1

[Done] exited with code=0 in 0.089 seconds

```

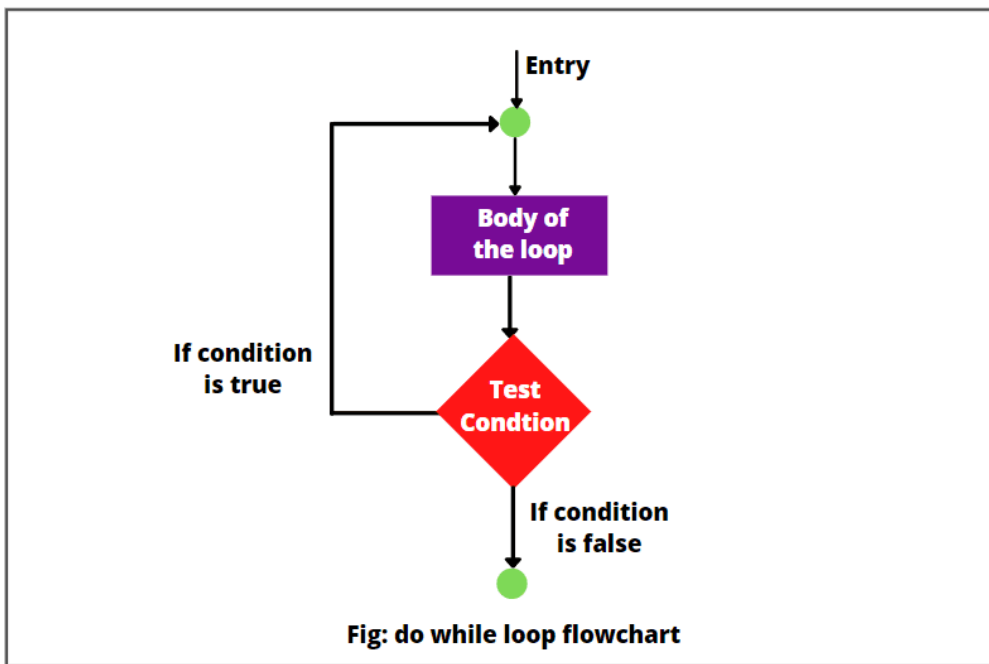
Do while loop

Syntax :

```

do {
    // body of loop
} while(condition)

```



- The loop's body is first executed. The condition is analyzed afterwards.
- The body of the loop within the do statement is repeated if the condition evaluates to true.
- A second assessment of the condition is made.
- The body of the loop within the do statement is repeated again if the condition evaluates to true.
- Up until the condition is evaluated as false, this process keeps going. The loop then ends.

Example 1: Write a program to print numbers from 1 to 7 in a line using do-while loop

```
let result = '';
let i = 0;
do {
  i = i + 1;
  result = result + i;
} while (i < 7);
console.log(result);
```

Output:

```
[Running] node "c:\Users\ACER\Desktop\First P
1234567

[Done] exited with code=0 in 0.105 seconds
```