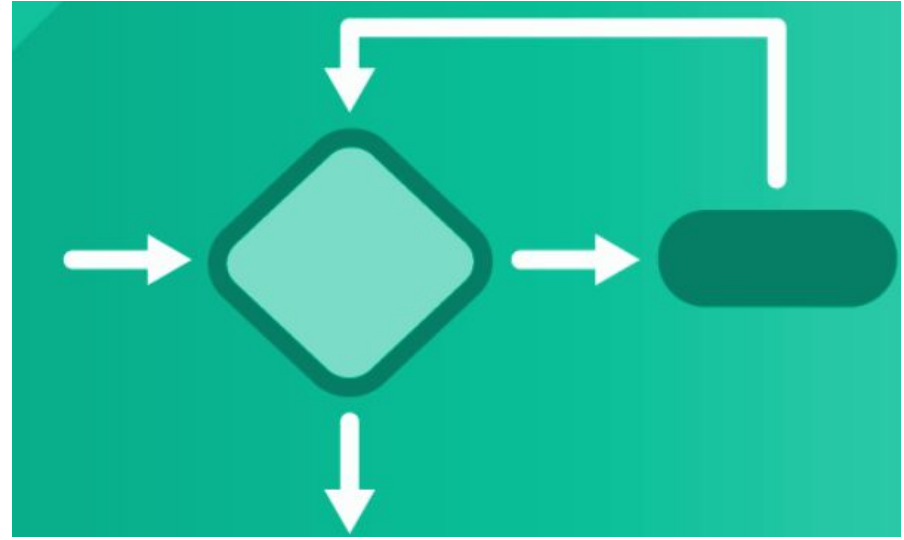


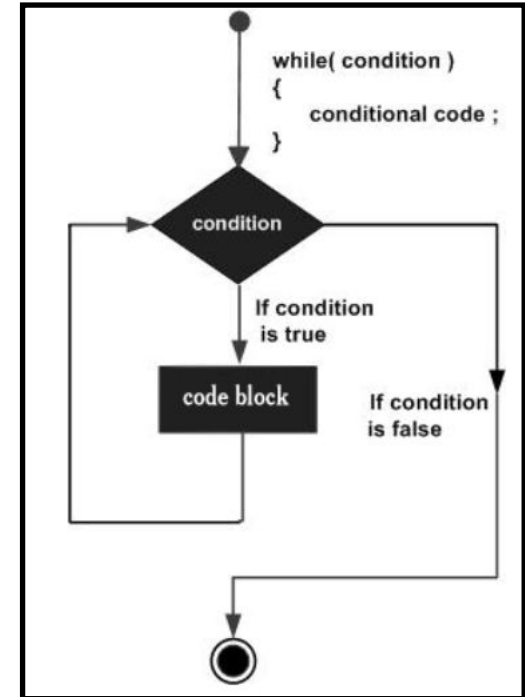
Javascript Loops



- The While Loop is a **control flow statement** used to execute the code **repeatedly** as long as the **condition** is **true**.

Syntax

```
while (condition) {  
    // code block to be executed  
}
```



- **Similar** to **repeated if** statements.
- The while loop is an **entry controlled loop**, i.e The block control **condition** is at the **starting** of the loop.
- The JavaScript while loop is used when the **number of iterations** are **not known**.

While Loop

While Loop
Example

Do While
Loop

Do While Loop
Example

While VS Do While

While Loop Example

```
let str = "";
let i = 0;
while (i < 5) {
  str += "<br>The number is " + i;
  i++;
}
```

Output

JavaScript While Loop

The number is 0
The number is 1
The number is 2
The number is 3
The number is 4

- In the code above, the statement inside the loop will run until the value of **i** is **less than 5**.
- The loop **variable** should be **incremented or decremented**. If **not**, the loop will **never end** and will **crash** the system.

While Loop

While Loop
Example

Do While
Loop

Do While Loop
Example

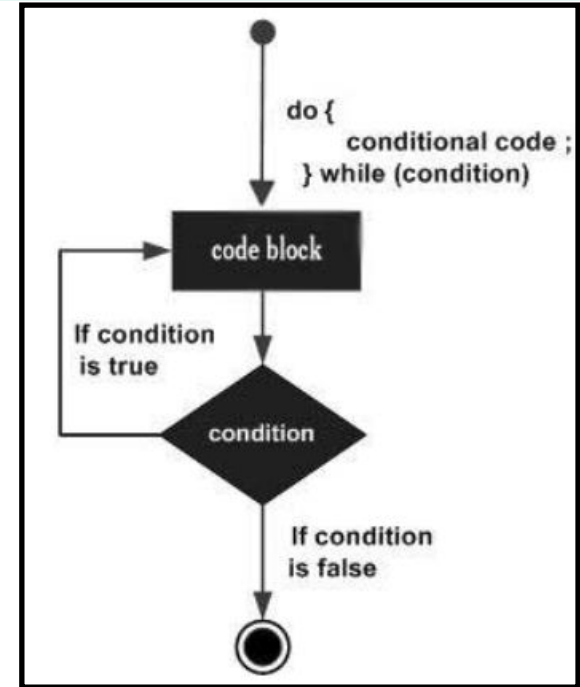
While VS Do While

Do While Loop

- The Do While Loop is an **Exit controlled loop**, i.e. the block **condition** is at the **end** of the loop.
- The Do While Loop executes the loop statement **before** checking the **condition**.

Syntax

```
do {  
    // code block to be executed  
}  
while (condition);
```



While Loop

While Loop
Example

**Do While
Loop**

Do While Loop
Example

While VS Do While

- It is **similar** to a **while** loop. The code will be executed **at least once** because the **condition** check happens at the **end** of the loop.
- The Do While Loop is executed an **infinite number of times** like While loop.



Do While Loop Example

```
let str = ""
let i = 0;
do {
  str += "<br>The number is " + i;
  i++;
}
while (i < 5);
```

Output

JavaScript Do While Loop

The number is 0
The number is 1
The number is 2
The number is 3
The number is 4

- In the above code, the statement inside the loop will run until the value of **i** is **less than 5**.
- Since the condition **check** is at the **end point**, the loop will be executed at least **once** even if the **condition** is **false**.
- The loop **variable** should be **incremented or decremented**. If **not**, the Loop will **never end** and will **crash** the system.

While Loop

While Loop
Example

Do While
Loop

Do While Loop
Example

While VS Do While

While VS Do While

While Loop	Do While Loop
It is an entry controlled loop .	It is an exit controlled loop .
The number of iteration is based on the loop condition .	The loop will be executed at least once , even before the execution of the condition .
The condition check happens at the start of the loop.	The condition check happens at the end of the loop.

While Loop

While Loop
Example

Do While
Loop

Do While Loop
Example

While VS Do While