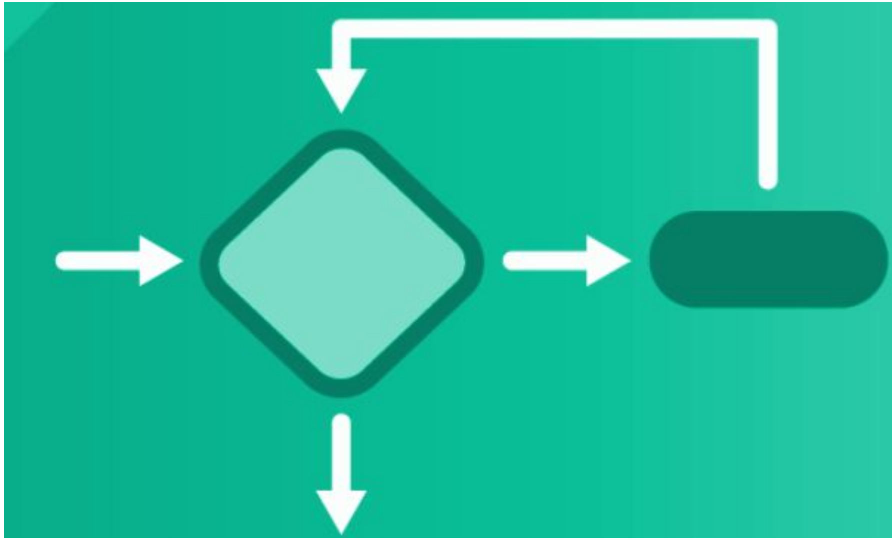
skill academy

Javascript Loops



Javascript Loops

- **Loops** can execute a block of code any **number of times**.
- **Loops** helps to run the **same code** any number of times with **different values** each time.

Entry Controlled Loop: The **Condition** is tested **before** the entry of the Loop body.
Eg: For Loop and While Loop.

Exit Controlled Loop: The **Condition** is tested at the **end** of the Loop body. In this case the loop will be executed at least **once** irrespective of the condition.
Eg: Do While Loop.

JavaScript Loops | Types of Loops | For Loop | For In Loop | For Of Loop

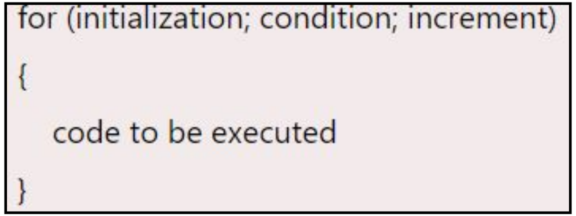
Types of Loops

- for
- for/in
- for/of
- while
- do/while

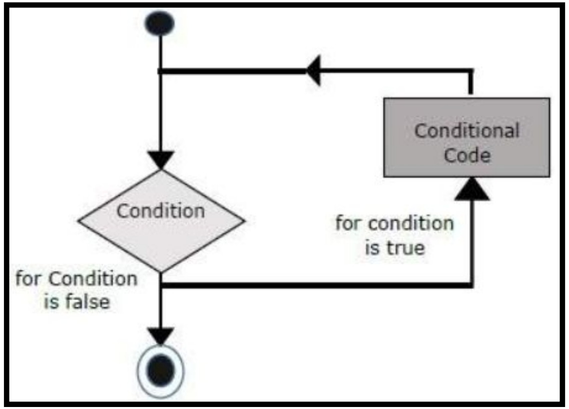
For Loop

- The For Loop is used when the **number of iterations** is **known**.

Syntax



```
for (initialization; condition; increment)
{
   code to be executed
}
```

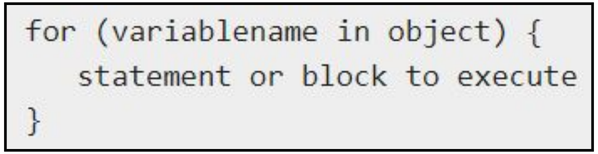


Initialization - **Initialize** the variable in use.
Condition - **Exit** condition is tested here. It returns a **boolean value**. Condition is checked **prior** to the execution of the loop statement.
Code - If condition is **true**, then the Loop statement is executed.
Increment/ Decrement - **Update** values for next **iteration**.

For In Loop

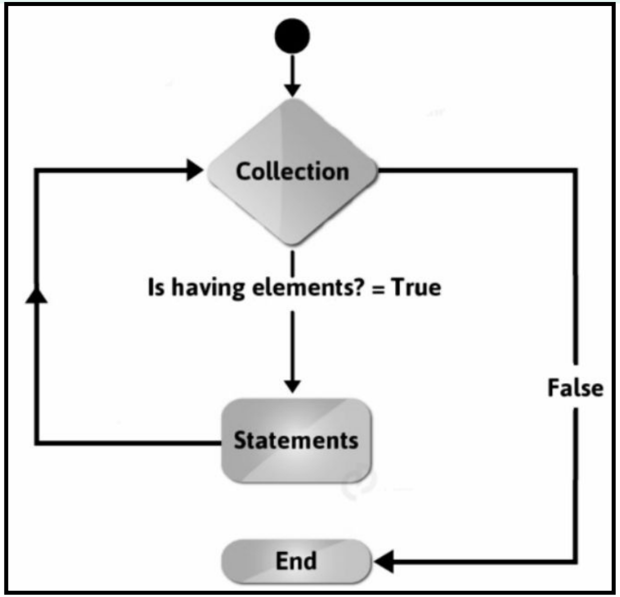
- The For In Loop is used to **iterate** through an **object’s keys**.

Syntax



```
for (variablename in object) {
   statement or block to execute
}
```

- The **order** of the properties iterated **may not match** with that defined in the object.
- So generally **for in loop** is **not** recommended for use over **arrays**.
- If the **index order** of the array is important, then in that case **don’t use** For In Loop.

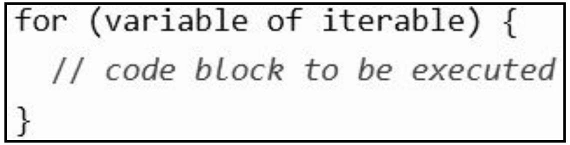


JavaScript Loops | Types of Loops | For Loop | **For In Loop** | For Of Loop

For Of Loop

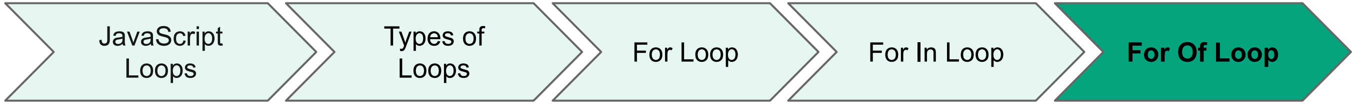
- The For of loop is used to **iterate** over the **values** of the **iterable object** such as
  - Array
  - String
  - Maps
  - NodeList etc.

Syntax



```
for (variable of iterable) {
  // code block to be executed
}
```

- The For of Loop is **not** supported in **Internet Explorer**.
- To execute on the value of each property of the object the For Of Loop calls a custom **iteration hook**.



JavaScript Loops

Types of Loops

For Loop

For In Loop

For Of Loop