

1. If-else Statement

- The if statement is used in JavaScript to execute the code if condition is true or false.
- There are three forms of if statement.
 - i). If Statement
 - ii). If else statement
 - iii). if else if statement

i). JavaScript If statement

- If is most basic statement of Decision making statement.
- It tells to program to execute a certain part of code only if particular condition or test is true.

Syntax :

```
if(expression)
{
    //set of statements
}
```

Example :

```
<script>
var a=10;
if(a>5)
{
    document.write("value of a is greater than 5");
}
</script>
```

ii). JavaScript if-else statement

- In general it can be used to execute one block of statement among two blocks.

Syntax :

```
if(expression)
{
//set of statements
}
else
{
//set of statements
}
```

Example :

```
<script>
var a=40;
if(a%2==0)
{
document.write("a is even number");
}
else{
document.write("a is odd number");
}
</script>
```

iii). JavaScript If...else if statement

- It evaluates the content only if expression is true from several expressions.

Syntax :

```
if(expression1)
{
//content to be evaluated if expression1 is true
}
else if(expression2)
{
//content to be evaluated if expression2 is true
}
else
{
//content to be evaluated if no expression is true
}
```

Example :

```
<script>
var a=40;
if(a==20)
{
document.write("a is equal to 20");
}
else if(a==5)
{
document.write("a is equal to 5");
}
else if(a==30)
{
```

```
document.write("a is equal to 30");
}
else
{
document.write("a is not equal to 20, 5 or 30");
}
</script>
```

2. Looping Statement

- Set of instructions given to the compiler to execute set of statements until condition becomes false is called loops.
- The basic purpose of loop is code repetition.
- The way of the repetition will be forms a circle that's why repetition statements are called loops.
- Some loops are available In JavaScript which are given below.
 - ❖ while loop
 - ❖ for loop
 - ❖ do-while

i). while loop

- When we are working with while loop always pre-checking process will be occurred.
- Pre-checking process means before evolution of statement block condition part will be executed.
While loop will be repeats in clock wise direction.

Syntax :

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

```
}
```

Example :

```
<script>
var i=10;
while (i<=13)
{
document.write(i + "<br/>");
i++;
}
</script>
```

ii). do-while loop

- In implementation when we need to repeat the statement block at least 1 then go for do-while.
- In do-while loop post checking of the statement block condition part will be executed.

Syntax :

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

Example :

```
<script>
var i=11;
do{
document.write(i + "<br/>");
i++;
}while (i<=15);
</script>
```

iii). for Loop

- For loop is a simplest loop first we initialized the value then check condition and then increment and decrements occurred.

Syntax :

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

Example :

```
<script>
for (i=1; i<=5; i++)
{
document.write(i + "<br/>")
}
</script>
```

3.Switch Statement

- The switch statement is used in JavaScript to execute one code from multiple expressions.

Syntax :

```
switch(expression)
{
case value1:
statement;
break;
case value2:
statement;
break;
.....
default:
statement;
}
```

Example of switch statement in javascript.

```
<script>
var grade='B';
var result;
switch(grade){
case 'A':
result="A Grade";
break;
case 'B':
result="B Grade";
break;
case 'C':
result="C Grade";
break;
default:
result="No Grade";
}
document.write(result);
</script>
```

Example of switch case in javascript

```
<html>
<head>
<script>
function myFunction()
{
var day;
day=Number(document.getElementById("first").value);
switch (day)
{
case 1:
day = "Sunday";
break;
case 2:
day = "Monday";
```

```
        break;
    case 3:
        day = "Tuesday";
        break;
    case 4:
        day = "Wednesday";
        break;
    case 5:
        day = "Thursday";
        break;
    case 6:
        day = "Friday";
        break;
    case 7:
        day = "Saturday";
        break;
    default:
        day="Enter valid number"
    }
    document.getElementById("demo").innerHTML =day;
}
</script>
</head>
<body>
<p>Enter any number (1 to 7):</p>
<input id="first">
<button onclick="myFunction()">Try it</button>
<p id="demo"></p>
</body>
</html>
```