



# Basic of Java script

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# introduction

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- Comments
- Variables
- Data types
- Operators
- Condition
- Loop
- Pop up boxes
- Function
- Set time out
- counter
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- events
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# introduction

- Java script is the world most popular programming lng
- Js is the programming lng of the web
- Easy to learn

## version of java script

- ES<sub>1</sub> , ES<sub>2</sub> , ES<sub>3</sub> (1997-1999)
- The first Main revision ES<sub>5</sub> (2009)
- The second revision ES<sub>6</sub> (2015)



# WAY TO IMPLEMENT JAVASCRIPT

- There are mainly 2 ways

- Internal

using script tag in the html

- External

making external js file

keep the extension of file script.js (xyz.js)

and then link it to html file

```
<script src="path name"> </script>
```

# How to display js (display statement)

- innerHTML.

```
document.getElementById("idname").innerHTML  
"any text " = 2 + 2 ;
```

- Document.write("the addition is" 5 + 5)
- window.alert("the addition is" 5 + 5)
- console.log("the addition is" 5 + 5)

# Comments in java script

- `// I AM JAVA SCRIPT`
- `/* I am javascript  
I m html  
I am css */`



# VARIABLES IN JS

- There are mainly three types
  - automatically
  - Let
  - Var
  - const

# How to define variables

- Variables are declared inside the script tag

example :

```
<script>
```

```
    let a = 10 ;
```

```
    var b = 20 ;
```

```
    const c = a + b ;
```

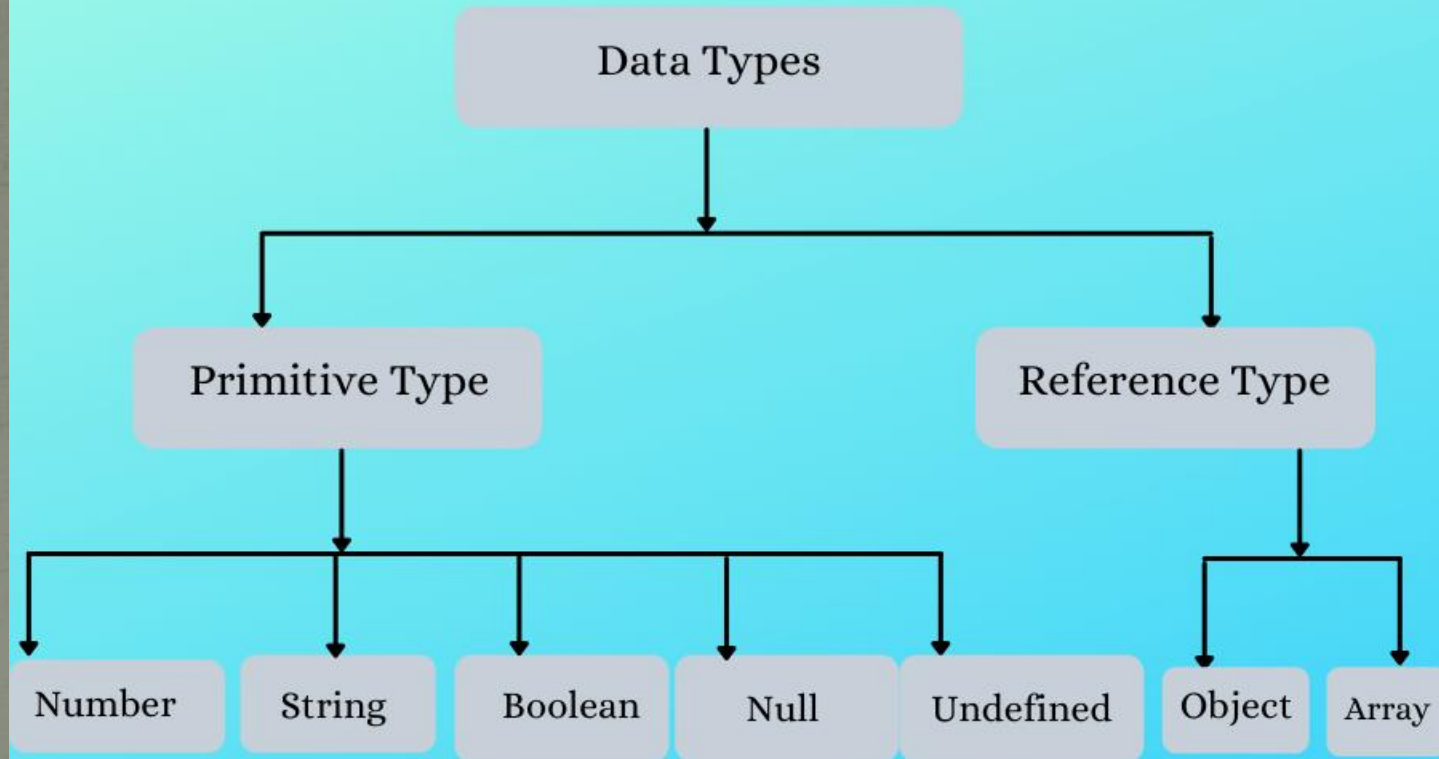
```
</script >
```



# DATA TYPES

- There are mainly two types of data types
- Primitive
- Non-primitive

# Data Types In JavaScript



# DATA TYPES PRIMITIVE

- 1. NUMBER

EX: - LET A = 10;  
      LET B = 20;

- 2.STRING

EX: - LET A = "MANAN"  
      LET B = "KOTHARI"



# DATA TYPES

- 3. BOOLEAN

EX: -     let a = 50;

let b = 10;

let c = a > b ; //boolean true false

document.write(c);

# DATA TYPES

- 4. NULL

LET A = "NULL" ;

## 5. UNDEFINED

EX: - LET A ;

# DATA TYPES NON - PRIMITIVE

- ARRAY : - IS A COLLECTION OF DATATYPES
- EX : - `let array = ["manan" , 20 , "kothari" , "tops" , "balvant" , "jay" , "sohil"]`
- `document.getElementById("demo").innerHTML = array[3];`



# DATA TYPES NON - PRIMITIVE

- OBJECT : -

- 

```
<script>
```

- let obj = {
- firstname : "manan" ,
- lastname : "kothari" ,
- age: 20 ,
- ismarried : false ,
- weight: 50.5
- }

- 

```
document.getElementById("demo").innerHTML ="<p> First Name : " +  
obj.firstname + "</p>" +
```

- "<p> Last Name : " + obj.lastname + "</p>" + "<p> Age : " + obj.age + "</p>" + "<p>  
Married : " + obj.ismarried + "</p>" + "<p> Weight : " + obj.weight + "</p>" ;
- </script>

# DATA TYPES NON - PRIMITIVE

- `<script>`
- `const d = new Date;`
- `document.write(d)`
- `</script>`

# DATE FUNCTIONS

## Date Get Methods

Method	Description
getFullYear()	Get <b>year</b> as a four digit number (yyyy)
getMonth()	Get <b>month</b> as a number (0-11)
getDate()	Get <b>day</b> as a number (1-31)
getDay()	Get <b>weekday</b> as a number (0-6)
getHours()	Get <b>hour</b> (0-23)
getMinutes()	Get <b>minute</b> (0-59)
getSeconds()	Get <b>second</b> (0-59)
getMilliseconds()	Get <b>millisecond</b> (0-999)
getTime()	Get <b>time</b> (milliseconds since January 1, 1970)



# OPERATORS

- ARITHMETIC OPERATORS
- LOGICAL OPERATORS
- ASSIGNMENT OPERATORS
- COMPARISON OPERATORS

# ARITHMETIC OPERATORS

- +
- -
- \*
- /
- ++(a++)
- -- (a--)

# ASSIGNMENT OPERATORS

- `console.log(a += b);`
- `console.log(a *= b);`
- `console.log(a /= b);`
- `console.log(a -= b);`
- `console.log(a);`



# COMPARISON OPERATORS

- ==
- ===
- !==
- !=
- >
- <

# LOGICAL OPERATORS

- &&
- ||

# Conditional statement

- If (condition is true)
- Else (condition is false)
- Else if (if the first condition is false)
- Switch case



# if

- `if (condition) {`  
  
`}`

Example :

```
let a = 10;
```

```
let b = 20;
```

```
if(a>b) {
```

```
document.write("true");
```

```
}
```

# else

- `if (condition) {`  
    *if the condition is true*  
`} else {`  
    *if the condition is false*  
`}`
- Example :

```
let a = 10;
```

```
let b = 20;
```

```
    if(a>b) {
```

```
        document.write("true");
```

```
    }
```

```
    else {
```

```
        document.write("false");
```

```
    }
```

# Else if statement

- `if (condition1) {`  
    *if condition1 is true*  
`} else if (condition2) {`  
    *if the condition1 is false and condition2 is true*  
`} else {`  
    *if the condition1 is false and condition2 is false*  
`}`



# Else if Example

```
const time = new Date().getHours();  
let day;  
  
if(time < 12) {  
  day="GOOD MORNING"  
}  
  
else if (time < 17){  
  day="good afternoon"  
}  
else {  
  day = "good night"  
}  
  
document.write(day)
```

# SWITCH CASE

- **switch** statement which handles exactly this situation, and it does so more efficiently than repeated **if...else if** statements.
- The **break** statements indicate the end of a particular case. If they were omitted, the interpreter would continue executing each statement in each of the following cases

# SWITCH CASE

```
var dayNumber = new  
    Date().getDay();  
var day = "";  
switch (dayNumber) {  
    case 0:  
        day = "Sunday";  
        break;  
    case 1:  
        day = "Monday";  
        break;  
    case 2:  
        day = "Tuesday";  
        break;  
    case 3:  
        day = "Wednesday";  
        break;
```

```
    case 4:  
        day = "Thursday";  
        break;  
    case 5:  
        day = "Friday";  
        break;  
    case 6:  
        day = "Saturday";  
        break;  
    default:  
        break;  
}
```



# Switch case examples : -

```
let x = "o";
```

```
switch (x) {  
  case o:  
    text = "Off";  
    break;  
  case 1:  
    text = "On";  
    break;  
  default:  
    text = "No value found";  
}
```

# Switch case examples : -

```
switch (new Date().getDay()) {  
    case 4:  
    case 5:  
        text = "Soon it is Weekend";  
        break;  
    case 0:  
    case 6:  
        text = "It is Weekend";  
        break;  
    default:  
        text = "Looking forward to the Weekend";  
}
```

# Switch case examples : -

- ```
switch (new Date().getDay()) {  
    default:  
        text = "Looking forward to the Weekend";  
        break;  
    case 6:  
        text = "Today is Saturday";  
        break;  
    case 0:  
        text = "Today is Sunday";  
}
```



# Loop

- For
- While
- Do while

# For loop

```
<script>
```

```
  for (i = 0; i <= 5; i++) {
```

```
    document.write("manan" + "<hr>")
```

```
  }
```

```
</script>
```

# while

```
<script>
```

```
  let i=0
```

```
  while (i<=10) {
```

```
    document.write("manan" + "<hr>")
```

```
    i++
```

```
  }
```

```
</script>
```



# Do while

```
let i=0
```

```
do {
```

```
    document.write("MANAN"+"<hr>")
```

```
    i++
```

```
} while (i<5);
```

# Pop up boxes

- Alert
- Confirm Box
- Prompt Box

# Pop up boxes

- `window.confirm("sometext");`
- `alert("I am an alert box!");`
- `window.prompt("sometext", "defaultText");`



# Function

```
function abc() {  
  Console.log();  
}
```

# Set time out

```
<p id="demo"> I AM MANAN </p>
```

```
<script>
```

```
    setTimeout(() => {
```

```
        document.getElementById('demo').style.color=
"red";
```

```
        document.getElementById("demo").style.back
ground="black";
```

```
    }, 5000);
```

```
</script>
```

# Counter

```
<script>
```

```
    counts = setInterval(manan);  
    upto = 0;
```

```
    function manan() {  
    var count = document.getElementById("demo");  
    count.innerHTML=++upto;  
    if(upto==300) {
```

```
        clearInterval(counts);  
    }
```

```
}
```

```
</script>
```



# events

- Onclick
- Onselect
- Onchange
- Onblur

# onclick

```
<button onclick="Demo()">Click Me</button>
```

```
<script>
```

```
function Demo()
```

```
{
```

```
alert("you have clicked on Button!");
```

```
}
```

```
</script>
```

# onselect

```
<input type="text" value="Good Morning"  
  onselect="slct()">
```

```
<script>
```

```
function slct()
```

```
{
```

```
  alert("you have selected some characters!");
```

```
}
```

```
</script>
```



# onchange

```
<select name="" id="fruit" onchange="Myfunc()">
  <option value="Apple">Apple</option>
  <option value="Orange">Orange</option>
  <option value="Kiwi">Kiwi</option>
  <option value="Mango">Mango</option>
</select>
<h1 id="demo"></h1>
<script> function Myfunc()
{
  let c = document.getElementById('fruit').value;
  // alert(c);
  document.getElementById('demo').innerHTML = "You have selected "+c;
}
</script>
```

# onblur

```
<input type="text" id="fname" onblur="myFunction()">
```

```
<script>
```

```
function myFunction() {
```

```
  let x = document.getElementById("fname");
```

```
  x.value = x.value.toUpperCase();
```

```
}
```

```
</script>
```