

Javascript data types and operators

Js data types

Illustration with a program

```
<!DOCTYPE html>
<html>
<head>
  <title>js data types</title>
</head>
<h1>Compiled by Er.Gaurab Mishra</h1>
<body>
  <script type="text/javascript">
    //string data type
    var a="Hello";
    var b="world";
    document.write(a + "<br>");
    document.write(b + "<br>");

    //number data type
    var a=24;
```

```
var b=1.2;  
var c=0xff;  
var d=1.54e4;  
var e=4.25e-6;  
var f=4.25e+6;  
document.write(a + "<br>");  
document.write(b + "<br>");  
document.write(c + "<br>");  
document.write(d + "<br>");  
document.write(e + "<br>");  
document.write(f + "<br>");  
/*
```

The number data type also includes some special values like infinity and NAN(not a number)

```
*/  
document.write(16/0);  
document.write(-16/0);  
document.write(16/-0);  
  
document.write(0/0);  
document.write(NaN +1);  
document.write(NaN -4);
```

```
document.write("sometext"/2);  
document.write("<br>");
```

```
//Boolean Data type  
var isReading=true;  
var isSleeping=false;  
document.write(isReading + "<br>");  
document.write(isSleeping + "<br>");
```

```
/*boolean values also comes as a result of comparison*/  
var a=2, b=5, c=10;  
document.write(b>a);  
document.write("<br>");  
document.write(b>c);  
document.write("<br>");
```

```
/*bigInt data type  
add n at the end of the digit to represent huge number*/  
var  
a=12345651356153461234126346134651234652135163651356136153761537165371537615  
37615371653715735321667890101010103434343443n;  
document.write(a + "<br>");
```

//special data type ->> Null and Undefined

//Null data type

var age=null;

document.write(age);

document.write("
")

//Undefined data type

var address;

document.write(address);

document.write("
")

//object data type (key-value pairs)

var car={

 model:"Honda",

 color:"Matt Black",

 mileage : "50km/l"

}

//print variables values in console

console.log(car);

//array data type

```
var student=['ram','shyam','hari','gopal'];  
document.write(student[1]);
```

```
</script>  
</body>  
</html>
```

Javascript operators

Illustration with a program

```
<html>  
<head>  
  <title>js operators</title>  
  <h1>Compiled by Er.Gaurab Mishra</h1>  
</head>  
<body>  
<script type="text/javascript">  
  
  //arithmetic operators  
  var x=4;
```

```
var y=5;
document.write(x+y + "<br>"); //addition
document.write(x-y + "<br>"); //subtraction
document.write(x*y + "<br>"); //multiplication
document.write(x/y + "<br>"); //division
document.write(x%y + "<br>"); //remainder
z=x++;    //post increment
document.write(z , x + "<br>");
z=++x;    //pre increment
document.write(z , x + "<br>");
z=y--;    //post decrement
document.write(z , y + "<br>");
z=--y;    //pre decrement
document.write(z , y + "<br>");
document.write("<br>");
```

//Assignment operator

```
var x=10;    //assignment
document.write(x + "<br>");
x+=30;       //add and assignment
document.write(x + "<br>");
```

```
x-=5;           //subtract and assignment
document.write(x + "<br>");
x*=10;          //multiply and assignment
document.write(x + "<br>");
x/=2;           //divide and assignment
document.write(x + "<br>");
x%=2;           //modulus and assignment
document.write(x + "<br>");
document.write("<br>");
```

```
    //comparison operators
var a=5,b=10,c="5",d=10;
document.write(a==b); //equal to
document.write("<br>");
document.write(a!=b); //not equal to
document.write("<br>");
document.write(a==c); //equal to
document.write("<br>");
document.write(a===c); //strict equal to
document.write("<br>");
document.write(a!=c); //not equal to
document.write("<br>");
```

```
document.write(a!=c); //strict not equal to  
document.write("<br>");  
document.write(a>b); //greater than  
document.write("<br>");  
document.write(a<b); //less than  
document.write("<br>");  
document.write(a>=d); //greater than or equal to  
document.write("<br>");  
document.write(a<=d); //less than or equal to  
document.write("<br>");  
document.write("<br>");
```

//logical operators

```
var x=5, y=7;  
document.write(x==5 && y==7); //logical and  
document.write("<br>");  
document.write(x==5 && y==6);  
document.write("<br>");  
document.write(x==5 || y==1); //logical or  
document.write("<br>");  
document.write(x==2 || y==1);  
document.write("<br>");
```



```
document.write(!(x==y));    //logical not  
document.write("<br>");
```

```
//conditional operator (ternary operator)  
var a=10;  
var b=20;  
var max;  
max=(a>b)?a:b;  
document.write(max);  
document.write("<br>");
```

```
//Type of operator  
let u=3;  
var b="kmc";  
const v=1.45;  
document.write(typeof u,"<br>");  
document.write(typeof b,"<br>");  
document.write(typeof v,"<br>");
```

```
//string operator (concatenation operator)  
let text1="kmc";  
let text2="college";
```

```
let text3=text1 + " " + text2;  
document.write(text3);  
document.write("<br>");  
//bitwise operators  
var a=2;  
var b=3;  
document.write(a&b,"<br>");  
document.write(a|b,"<br>");  
document.write(a^b,"<br>");
```

```
</script>
```

```
</body>
```

```
</html>
```