1.
```html
<!DOCTYPE html>
<html>
<body>

<h1>JavaScript Can Validate Input</h1>

<p>Please input a number between 1 and 10:</p>

<input id="numb" type="number">

<button type="button" onclick="myFunction()">Submit</button>

<p id="demo"></p>

<script>
function myFunction() {
    var x, text;

    // Get the value of the input field with id="numb"
    x = document.getElementById("numb").value;

    // If x is Not a Number or less than one or greater than 10
    if (isNaN(x) || x < 1 || x > 10) {
        text = "Input not valid";
    } else {
        text = "Input OK";
    }
    document.getElementById("demo").innerHTML = text;
}
</script>

</body>
</html>
```

2.
```html
<!DOCTYPE html>
<html>
<head>
<script>
function myFunction() {
    document.getElementById("demo").innerHTML =
"Paragraph changed.";
```

```html
}
</script>
</head>
<body>
<h1>My Web Page</h1>
<p id="demo">A Paragraph</p>
<button type="button" onclick="myFunction()">Try
it</button>
</body>
</html>
```

3.
```html
<!DOCTYPE html>
<html>
<body>

<h1>My First Web Page</h1>
<p>My First Paragraph</p>

<p id="demo"></p>

<script>
document.getElementById("demo").innerHTML = 5 +
6;
</script>

</body>
</html>
```

4.
```html
<!DOCTYPE html>
<html>
<body>

<h1>My First Web Page</h1>
<p>My first paragraph.</p>
```

```
<script>
console.log(5 + 6);
</script>

</body>
</html>
```

5.
```
<!DOCTYPE html>
<html>
<body>

<h1>JavaScript Statements</h1>

<p>Statements are separated by semicolons.</p>

<p>The variables x, y, and z are assigned the
values 5, 6, and 11:</p>

<p id="demo"></p>

<script>
var x = 5;
var y = 6;
var z = x + y;
document.getElementById("demo").innerHTML = z;
</script>

</body>
</html>
```

6.
```
<!DOCTYPE html>
<html>
<body>
```

```html
<h1>JavaScript Expressions</h1>

<p>Expressions compute to values.</p>

<p id="demo"></p>

<script>
var x = 5;
document.getElementById("demo").innerHTML = x *
10;
</script>

</body>
</html>
```

7.
```html
<!DOCTYPE html>
<html>
<body>

<h1>JavaScript Expressions</h1>

<p>Expressions compute to values.</p>

<p id="demo"></p>

<script>
document.getElementById("demo").innerHTML =
"John" + " "  + "Doe";
</script>

</body>
</html>
```

8.

```
<!DOCTYPE html>
<html>
<body>

<p id="demo"></p>

<script>
var d = new Date("October 13, 2014 11:13:00");
document.getElementById("demo").innerHTML = d;
</script>

</body>
</html>
```

9.
```
<!DOCTYPE html>
<html>
<body>

<p>Display the value of Boolean(10 > 9):</p>

<button onclick="myFunction()">Try it</button>

<p id="demo"></p>

<script>
function myFunction() {
    document.getElementById("demo").innerHTML =
Boolean(10 > 9);
}
</script>

</body>
</html>
```

10.

```html
<!DOCTYPE html>
<html>
<body>

<p>Remove the comment (at the beginning of each
line) to test each case:</p>

<p id="demo"></p>

<script>
var x;
//x = (0 == "");      // true
//x = (1 == "1");     // true
//x = (1 == true);    // true
//x = (0 === "");     // false
//x = (1 === "1");    // false
//x = (1 === true);   // false
document.getElementById("demo").innerHTML = x;
</script>

</body>
</html>
```

11.
```html
<!DOCTYPE html>
<html>
<body>

<p id="demo"></p>

<script>
var day;
switch (new Date().getDay()) {
    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:
         day = "unknown";
}
document.getElementById("demo").innerHTML =
"Today is " + day;
</script>

</body>
</html>


12.
<!DOCTYPE html>
<html>
<body>

<p>Click the button to display todays day of the
```

week.</p>

<button onclick="myFunction()">Try it</button>

<p id="demo"></p>

```
<script>
function myFunction() {
    var d = new Date();
    var n = d.getDay()
    document.getElementById("demo").innerHTML =
n;
}
</script>
```

</body>
</html>

13.
```
<!DOCTYPE html>
<html>
<body>
```

<p>Creating a JavaScript Object.</p>

<p id="demo"></p>

```
<script>
var person = {
    firstName : "John",
    lastName  : "Doe",
    age       : 50,
    eyeColor  : "blue"
};

document.getElementById("demo").innerHTML =
```

```
person.firstName + " " + person.lastName;
</script>

</body>
</html>


14.
<!DOCTYPE html>
<html>
<body>

<p id="demo"></p>

<script>
function person(first, last, age, eye) {
    this.firstName = first;
    this.lastName = last;
    this.age = age;
    this.eyeColor = eye;
}

var myFather = new person("John", "Doe", 50,
"blue");
var myMother = new person("Sally", "Rally", 48,
"green");

document.getElementById("demo").innerHTML =
"My father is " + myFather.age + ". My mother is
" + myMother.age;
</script>

</body>
</html>
```

```
15.
<!DOCTYPE html>
<html>
<body>

<p>There are two different ways to access an
object property:</p>
<p>You can use .property or ["property"].</p>

<p id="demo"></p>

<script>
var person = {
    firstname:"John",
    lastname:"Doe",
    age:50,
    eyecolor:"blue"
};
document.getElementById("demo").innerHTML =
person["firstname"] + " is " + person["age"] + "
years old.";
</script>

</body>
</html>


16.
<!DOCTYPE html>
<html>
<body>

<p id="demo"></p>

<script>
var txt = "";
```

```
var person = {fname:"John", lname:"Doe", age:
25};
var x;
for (x in person) {
    txt += person[x] + " ";
}
document.getElementById("demo").innerHTML = txt;
</script>

</body>
</html>


17.
<!DOCTYPE html>
<html>
<body>

<p>You can add new properties to existing
objects.</p>

<p id="demo"></p>

<script>
var person = {
    firstname:"John",
    lastname:"Doe",
    age:50,
    eyecolor:"blue"
};
person.nationality = "English";
document.getElementById("demo").innerHTML =
person.firstname + " is " + person.nationality +
".";
</script>
```

```
</body>
</html>


18.
<!DOCTYPE html>
<html>
<body>

<p>You can delete object properties.</p>

<p id="demo"></p>

<script>
var person = {
    firstname:"John",
    lastname:"Doe",
    age:50,
    eyecolor:"blue"
};
delete person.age;
document.getElementById("demo").innerHTML =
person.firstname + " is " + person.age + " years
old.";
</script>

</body>
</html>


19.
<!DOCTYPE html>
<html>
<body>

<p>Creating and using an object method.</p>
```

```html
<p>An object method is stored as a function
definition,
in an object property.</p>

<p id="demo"></p>

<script>
var person = {
    firstName: "John",
    lastName : "Doe",
    id       : 5566,
    fullName : function() {
        return this.firstName + " " +
this.lastName;
    }
};

document.getElementById("demo").innerHTML =
person.fullName();
</script>
</body>
</html>
```

20. doing an object prototype ,
```html
<!DOCTYPE html>
<html>
<body>

<p id="demo"></p>

<script>
function person(firstName,lastName,age,eyeColor)
{
    this.firstName = firstName;
```

```
        this.lastName = lastName;
        this.age = age;
        this.eyeColor = eyeColor;
        this.changeName = function (name) {
            this.lastName = name;
        }
    }
    var myMother = new person("Sally","Rally",
    48,"green");
    myMother.changeName("Doe");
    document.getElementById("demo").innerHTML =
    "My mother's last name is " + myMother.lastName;
    </script>

    </body>
    </html>


    21.
    <!DOCTYPE html>
    <html>
    <body>

    <p id="demo"></p>

    <script>
    function person(first, last, age, eye) {
        this.firstName = first;
        this.lastName = last;
        this.age = age;
        this.eyeColor = eye;
    }

    var myFather = new person("John", "Doe", 50,
    "blue");
    var myMother = new person("Sally", "Rally", 48,
```

```
"green");

document.getElementById("demo").innerHTML =
"My father is " + myFather.age + ". My mother is
" + myMother.age;
</script>

</body>
</html>
```

22.
```
<!DOCTYPE html>
<html>
<body>

<p id="demo"></p>

<script>
function person(first, last, age, eye) {
    this.firstName = first;
    this.lastName = last;
    this.age = age;
    this.eyeColor = eye;
}

var myFather = new person("John", "Doe", 50,
"blue");
var myMother = new person("Sally", "Rally", 48,
"green");

myFather.name = function() {
    return this.firstName + " " + this.lastName;
}; //adds a new function to the object

document.getElementById("demo").innerHTML =
```

```
"My father is " + myFather.name();
</script>

</body>
</html>

22.
<!DOCTYPE html>
<html>
<body>

<p id="demo"></p>

<script>
function person(first, last, age, eye) {
    this.firstName = first;
    this.lastName = last;
    this.age = age;
    this.eyeColor = eye;
    this.name = function() {
        return this.firstName + " " +
this.lastName
    };
}

var myFather = new person("John", "Doe", 50,
"blue");
document.getElementById("demo").innerHTML =
"My father is " + myFather.name();
</script>

</body>
</html>

23. introducing json, and data transfer using
javascript
```

```
<!DOCTYPE html>
<html>
<body>

<h2>Create Object from JSON String</h2>

<p id="demo"></p>

<script>
var text = '{"employees":[' +
'{"firstName":"John","lastName":"Doe" },' +
'{"firstName":"Anna","lastName":"Smith" },' +
'{"firstName":"Peter","lastName":"Jones" }]}';

obj = JSON.parse(text);
document.getElementById("demo").innerHTML =
obj.employees[1].firstName + " " +
obj.employees[1].lastName;
</script>

</body>
</html>
```