(1) what is Javascript ?

- - > JavaScript is a Client side Scripting lang just like other prog (c,c++) but js not able to connect with the DB directly.

- - > JavaScript is used for making our web pages dynamic from client side.

- - > With the help of JavaScript we can do some dynamic op like / * - +

- - > Without refreshing or reloading our page will get and put some data from the server (ajax/fetch).

(2) What is the use of isNaN function?

- - > Nan means Not-a-number.

- - > when the value is NaN than isNaN is return the true and when the value is not NaN than isNaN is return the false.

(3) What is negative Infinity?

- - > which is less than any real number. The symbol “-∞” is used to denote negative infinity.

- - > negative infinity is a special numeric value that is returned when an arithmetic operation or mathematical function generates a negative value greater than the largest representable number in JavaScript.

(4) Which company developed JavaScript?

- - > JavaScript was created at Netscape Communications by Brendan Eich in 1995.

(5) What are undeclared and undefined variables?

=> Undeclared variables are those that have not been declared or defined in the current scope, while undefined variables are those that have been declared but not given a value.

(6) Write the code for adding new elements dynamically?

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
    <title>Document</title>
</head>
<body>

    <h2>new element dynamically</h2>

    <div id="newelement">
        <!-- <p></p> -->
    </div>
    <button onclick="createNewelement()">Create element</button>


<Script>

    function createNewelement() {
        var newpragraph = document.createElement('p');
        newpragraph.textContent = "this is dynamically";

        var newelement = document.getElementById('newelement');
        newelement.appendChild(newpragraph);
    };
</Script>
</body>
</html>
```

(7) What is the difference between ViewState and SessionState?

- - >

(8) What is === operator?

- - > The strict equality (===) operator checks whether its two operands are equal, returning a Boolean result.

```
let a = 5;
let b = "5";
console.log("a === b", a === b); //false
```

(9) How can the style/class of an element be changed?

- - > To change all classes for an element:

document. getElementById("MyElement"). className = "MyClass";

(10) How to read and write a file using JavaScript?

- - >

(11) What are all the looping structures in JavaScript?

- - > type of loop

* for Statement
* while Statement
* do while Statement
* for....in Statement
* for....of Statement

(1) for Statement

- - >

```
    for (let count = 1; count <=  10; count++){
    console.log("i am vihar");
    };
    // console.log("loop has ended");
```

(2) while Statement

- - >

```
let i = 1;
    while ( i <= 5) {
      console.log("i am vihar");
       i++;
    }
```

(3) do while Statement

- - >

```
 let i = 1;
    do {
      console.log("i am vihar");
    i++;
    } while(i < 10);
```

(4) for....in Statement

- - >

```
    let student {
      name: "vihar",
      age: 18,
      cgpl: 5.1,
      ispass: true,
    };
    for (let key in student) {
      console.log("key =",key, "value = ",Student[key]);
    }
```

(5) for....of Statement

- - >

```
    let str = "i am vihar";
    for(let i of str) {
    console.log("i = ",i);
    }
```

(12) How can you convert the string of any base to an integer in JavaScript?

- - >

```
    let str = "vihar";
console.log(typeof str);
str = Number.parseInt(str);
console.log(typeof str);
```

(13) What is the function of the delete operator?

- - > The delete operator removes a property from an object.

```
let emp = {
        FirstName: "vihar",
        lastName: "barvaliya",
};
       console.log(emp.FirstName);
       delete emp.FirstName;
       console.log(emp.FirstName);
```

(14) What are all the types of Pop up boxes available in JavaScript?

- - > JavaScript has three kind of popup boxes: Alert box, Confirm box, and Prompt box.

(15) What is the use of Void (0)?

- - > JavaScript void 0 means returning undefined (void) as a primitive value.

(16) How can a page be forced to load another page in JavaScript?

- - > Approach: We can use window. location property inside the script tag to forcefully load another page in Javascript.

(17) What are the disadvantages of using innerHTML in JavaScript?

- - > It is very slow because as inner HTML already parses the content even we have to parse the content again so that's why it takes time.

(18) Create password field with show hide functionalities.

- - >

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>

    <h2>hide password</h2>
    <section>

        <label for="password">Enter Password</label>
        <input type="password" value="" id="typepass">
        <br>
        <label for="Show-password">Show Password</label>
        <input type="checkbox" onclick="toggle()">
    </section>
```

```
    <script>
        function toggle() {
            let temp = document.getElementById("typepass");

            if (temp.type === "password") {
                temp.type = "text";
            }
            else{
                temp.type = "password";
            }
        }
    </script>
</body>
</html>
```

(19) Create basic math operation in JS.

- - >

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
        *{
            margin: 0;
            padding: 0;
            box-sizing: border-box;
        }
        div{
            padding: 10px 0 0 0;
            text-align: center;
        }

        div input[type=number]{
            margin: 8px 0;
            padding: 8px;
            width: 30%;
            font-size: 16px;
        }
```

```
        div input[type=number]:read-only {
            border: 1px solid #000;
            background-color: #666;
            color: #fff;
            text-align: center;
            font-size: 22px;
            font-weight: bold;
        }
        div button {
            margin: 0 4px;
            padding: 6px 0;
            width: 62px;
            border: 1px solid #999;
            background-color: #f7f7f7;
            font-size: 16px;
            font-weight: bold;
            cursor: pointer;
        }
    </style>
</head>
<body>

    <div>
        <h2>simple Arithmetic Calculator</h2> <hr>
        <input type="number" placeholder="Enter Any Number" id="num1">
        <br>
        <input type="number" placeholder="Enter Any Number" id="num2">
        <br>
        <button id="add">+</button>
        <button id="sub">-</button>
        <button id="mul">*</button>
        <button id="div">/</button><br>
        <input type="number" readonly id="result" placeholder="=">
    </div>

    <script>
        var n1 = document.getElementById("num1");
        var n2 = document.getElementById("num2");
        var res = document.getElementById("result");

        document.getElementById("add").addEventListener("click", function() {
            res.value = parseInt(n1.value)+parseInt(n2.value);
        });

        document.getElementById("sub").addEventListener("click", function() {
```

```
            res.value = parseInt(n1.value)-parseInt(n2.value);
        });

        document.getElementById("mul").addEventListener("click", function() {
            res.value = parseInt(n1.value)*parseInt(n2.value);
        });

        document.getElementById("div").addEventListener("click", function() {
            res.value = parseInt(n1.value)/parseInt(n2.value);
        });
    </script>
</body>
</html>
```

(20) Create student result

→

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
        /* table tr .br{
            border: solid 2px ;
        } */
        table tr td {
            border: solid 2px;
        }

        /* .containar {
            border: solid 2px;
        } */
        /* .border label{
            border: solid 3px;
            text-align: center;
        }
        .border input{
            border: solid 3px;
```

```
            text-align: center;
        } */
    </style>
</head>

<body>


    <div class="containar">
        <div>
            <div class="book1 border">
                <label for="Computer">Computer :</label>
                <input type="number" id="bookOne" name="" placeholder="enter
marks">
            </div>
            <div class="book2 border">
                <label for="English">English :</label>
                <input type="number" id="booktwo" name="" placeholder="enter
marks">
            </div>
            <div class="book3 border">
                <label for="python">python :</label>
                <input type="number" id="bookthree" name="" placeholder="enter
marks">
            </div>
            <div class="book4 border">
                <label for="java">java :</label>
                <input type="number" id="bookfour" name="" placeholder="enter
marks">
            </div>
            <div class="book5 border">
                <label for="php">php :</label>
                <input type="number" id="bookfive" name="" placeholder="enter
marks">
            </div>
            <div>
                <button onclick="calculate()">calculate</button>
            </div>
        </div>
        <div>
            <table>
                <tr>
                    <td class="br">Total Marks:</td>
                    <td>500</td>
                </tr>
```

```
                <br>
                <tr>
                    <td class="br">Obtained Marks:</td>
                    <td id="obtain"></td>
                </tr>
                <br>
                <tr>
                    <td class="br">Percentege:</td>
                    <td id="per"></td>
                </tr>
                <br>
                <tr>
                    <td class="br">Grade:</td>
                    <td id="Grade"></td>
                </tr>
                <br>
                <tr>
                    <td class="br">Remarks:</td>
                    <td id="remarks"></td>
                </tr>
            </table>
        </div>
    </div>

    <script>

        function calculate() {

            let a = parseInt(document.getElementById('bookOne').value);
            let b = parseInt(document.getElementById('booktwo').value);
            let c = parseInt(document.getElementById('bookthree').value);
            let d = parseInt(document.getElementById('bookfour').value);
            let e = parseInt(document.getElementById('bookfive').value);
            if (a > 100 || b > 100 || c > 100 || d > 100 || e > 100) {
                alert("Please enter correct value");
            }
            else {
                let obtain = a + b + c + d + e;
                document.getElementById("obtain").innerHTML = obtain;
                let per = obtain / 500 * 100;
                document.getElementById("per").innerHTML = per;
                if (a > 40 && b > 40 && c > 40 && d > 40 && e > 40) {
                    document.getElementById("remarks").innerHTML = "<span
style='color:blue'>Pass</span>";
                }
```

```
                else {
                    document.getElementById("remarks").innerHTML = "<span
style='color:red'>Fail</span>";
                }
                if (per >= 80) {
                    document.getElementById("Grade").innerHTML = "A";
                }
                else if (per >= 70) {
                    document.getElementById("Grade").innerHTML = "B";
                }
                else if (per >= 60) {
                    document.getElementById("Grade").innerHTML = "C";
                }
                else if (per >= 50) {
                    document.getElementById("Grade").innerHTML = "d";
                }
                else if (per >= 40) {
                    document.getElementById("Grade").innerHTML = "E";
                }
                else {
                    document.getElementById("Grade").innerHTML = "F";
                }
            }
        }
    </script>

</body>

</html>
```

(21) Create a slider using JavaScript?

→

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
```

```css
* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}

.containar {
    height: 500px;
    width: 1000px;
    box-shadow: 0px 0px 10px gray;
    display: flex;
    background-color: black;
    align-items: center;
    overflow: hidden;
    margin: auto;
}

.box {
    border: solid black;
    padding: 100px;
    text-align: center;
}

.cl-red {
    background-color: red;
}

.cl-blue {
    background-color: blue;
}

.cl-green {
    background-color: green;
}

.cl-yellow {
    background-color: yellow;
}

.cl-darkgray {
    background-color: darkgray;
}

.slider {
    justify-content: space-between;
```

```
            margin: 0 auto;
            display: flex;
        }

        .btn {
            text-align: center;
        }

        button {
            padding: 10px 30px;
        }
    </style>
</head>

<body>
            <!-- <h1>Simple Javascript Slider</h1> -->
    <div class="containar">
        <div class="slider">
            <div class="box cl-red"></div>
            <div class="box cl-blue"></div>
            <div class="box cl-green"></div>
            <div class="box cl-yellow"></div>
            <div class="box cl-darkgray"></div>
        </div>
    </div>

    <div class="btn">
        <button onclick="goprev()">prev</button>
        <button onclick="gonext()">next</button>
    </div>

    <script>


        const slide = document.querySelectorAll('.box')

        let count = 0

        slide.forEach(
            (box, index) => {
                box.style.left = `${index * 100}%`
            }
        )

        const slidebox = () => {
```

```
            slide.forEach(
                (box) => {
                    box.style.transform = `translateX(${count * 100}%)`
                }
            )
        }

        const goprev = () => {
            count++
            slidebox()
        }
        const gonext = () => {
            count--
            slidebox()
        }
    </script>



</body>

</html>
```