

1) WAP to print Swapping of 2 nos.
using JavaScript.

<script>

var a = 10;

var b = 5;

document.write(" before swapping : a = " + a +
" b = " + b + "
");

var temp = a;

a = b;

b = temp;

document.write(" After swapping : a = " + a +
" b = " + b);

</script>

2) WAP to reverse three digit number.

✶

<script>

var num = 123;

document.write ("original number : " + num + "
");

var rev = 0;

while (num != 0)

{

var digit = num % 10;

rev = rev * 10 + digit;

num = Math.floor (num/10);

}

document.write ("reverse number : " + rev);

</script>

3) WAP to calculate factorial of a given number.

<script>

var num = 5;

var fact = 1;

for (var i = 1; i < num; i++)

{

fact *= i;

}

document.write ("factorial of " + num + " is " + fact);

</script>

4) WAP to check prime number or not.

```

var num = 19;

function isPrime(num) {
    if (num < 2)
    {
        return false;
    }

    for (let i = 2; i <= num / 2; i++) {
        if (num % i === 0)
        {
            return false;
        }
    }

    return true;
}

if (isPrime(num)) {
    document.write(num + " is a prime");
}
else
{
    document.write(num + " is not prime");
}
    
```

5) WAP to matrix multiplication

2) <script>

```
var a = [[1,2,3],[4,5,6]];
var b = [[7,8],[9,10],[11,12]];
var product = a.map((row, i) =>
    b[0].map((_, j) =>
        row.reduce((sum, _, k) => sum + a[i][k] * b[k][j], 0)));
document.write("product of matrix : <br>");
```

```
product.forEach((row) => document.write(
    row.join(" ") + "<br>"));
```

</script>

Again? =>

```
var a = [[1,2,3],[4,5,6]];
var b = [[7,8],[9,10],[11,12]];
var product = a.map((row, i) => b[0].map((_, j) =>
    row.reduce((sum, _, k) => sum + a[i][k] * b[k][j], 0)));
document.write("product of matrix : <br>");
product.forEach((row) => document.write(row.join(
    " ") + "<br>"));
```


6) WAP to find the Simple Interest using function using argument and with return type.

```
<script>
function calculate SI (pri, rate, time)
{
```

```
    var int = (pri * rate * time) / 100;
    return int;
}
```

```
var pri = parseFloat ( prompt ("enter the principal amt : "));
```

```
var rate = parseFloat ( prompt ("enter the rate (%) in percentage : "));
```

```
var time = parseFloat ( prompt ("enter the time period (years) : "));
```

```
var simple interest = calculate SI ( pri, rate, time);
```

```
document.write (" simple interest : " + simple interest );
```

```
</script>
```

7) WAP to show list of common function of array in JavaScript?

4

```
var arr = [1, 2, 3, 4, 5];
document.write("Array : " + arr + "<br>");
document.write("push : " + arr.push(6) + arr + "<br>");
document.write("shift : " + arr.shift() + arr + "<br>");
document.write("unshift : " + arr.unshift(0) + arr + "<br>");
document.write("slice : " + arr.slice(1, 3) + "<br>");
document.write("splice : " + arr.splice(2, 1) + arr + "<br>");
document.write("concat : " + arr.concat([6, 7]) + "<br>");
document.write("reverse : " + arr.reverse() + "<br>");
document.write("pop : " + arr.pop() + arr + "<br>");
```


8.) A, Explain JS object in brief & implement an logic to fetch following JS object

```

var emp_detail = [
  { 'eno': 1001001, 'enm': 'amit', 'esal': 10000 },
  { 'eno': 1002002, 'enm': 'pankaj', 'esal': 20000 },
  { 'eno': 1001003, 'enm': 'vishvi', 'esal': 30000 }];

var empnumberstofind = 1002002;

var emp = emp_details.find(function (e) {
  return e.eno === empnumberstofind;
});

if (emp) {
  document.write("employee found <br>");
  document.write("employee number : " + emp.eno + "<br>");
  document.write("employee name : " + emp.enm + "<br>");
  document.write("employee salary : " + emp.esal + "<br>");
} else {
  document.write("employee with number " + empnumberstofind + " not find <br>");
}
  
```


- 9) Have a form with two checkboxes: "chocolate" & "vanilla" & a "check order" button. Have the button open a alert box that states either "you like chocolate", "you like vanilla", "you like both chocolate & vanilla", or "pick one!" if neither were checked. Uncheck all boxes after any of the alert are cleared.

* < body>

< h2> Choose your flavor: < /h2>

< label>

< input type = "checkbox" id = "chocolate">
"chocolate"

< /label>

< label>

< input type = "checkbox" id = "vanilla">
"vanilla"

< /label>

< br>

< br>

< button onclick = "checkOrder()"> check order

< /button>

< script>

function checkOrder ()

{

var choc = document.getElementById("chocolate").checked

~~Signature~~

DATE 31/10/24
PAGE

```
var i = document.getElementById("vanilla")  
checked;  
alert("choc & i van ? "you like both chocolate  
and veinilla": choc ? "you like chocolate":  
van ? "you like veinilla": "PICK ONE!");  
document.getElementById("chocolate").checked = false;  
document.getElementById("Vanilla").checked = false;  
}  
</script>  
</body>
```


10. Display 3 images & a single form text area on the page. Have 3 different words given display in the text area, depending on which image you click. Put the focus in the text area when the page has loaded.

```

<html>
<head>
  <title> Image </title>
  <style> .img { display: none; }
</style>
<body> <div>
  <input type="radio" name="img" id="first"
  onchange = "text()" >
  <label for="first"> 
</label>
  <input type="radio" name="img" id="second"
  onchange = "text()" >
  <label for="second"> 
</label>
  <input type="radio" name="img" id="third"
  onchange = "text()" >
  <label for="third"> 
</label> <br> <br>
  <input type="text" id="text" readonly>
</div>
  
```

<script>

function text ()

{

var first, second, third, textBox;

first = document.getElementById("first");

second = document.getElementById("second");

third = document.getElementById("third");

textBox = document.getElementById("text");

if (first.checked)

textBox.value = "first img click";

if (second.checked)

textBox.value = "second img click";

if (third.checked)

textBox.value = "third img click";

}

</script>

</body>

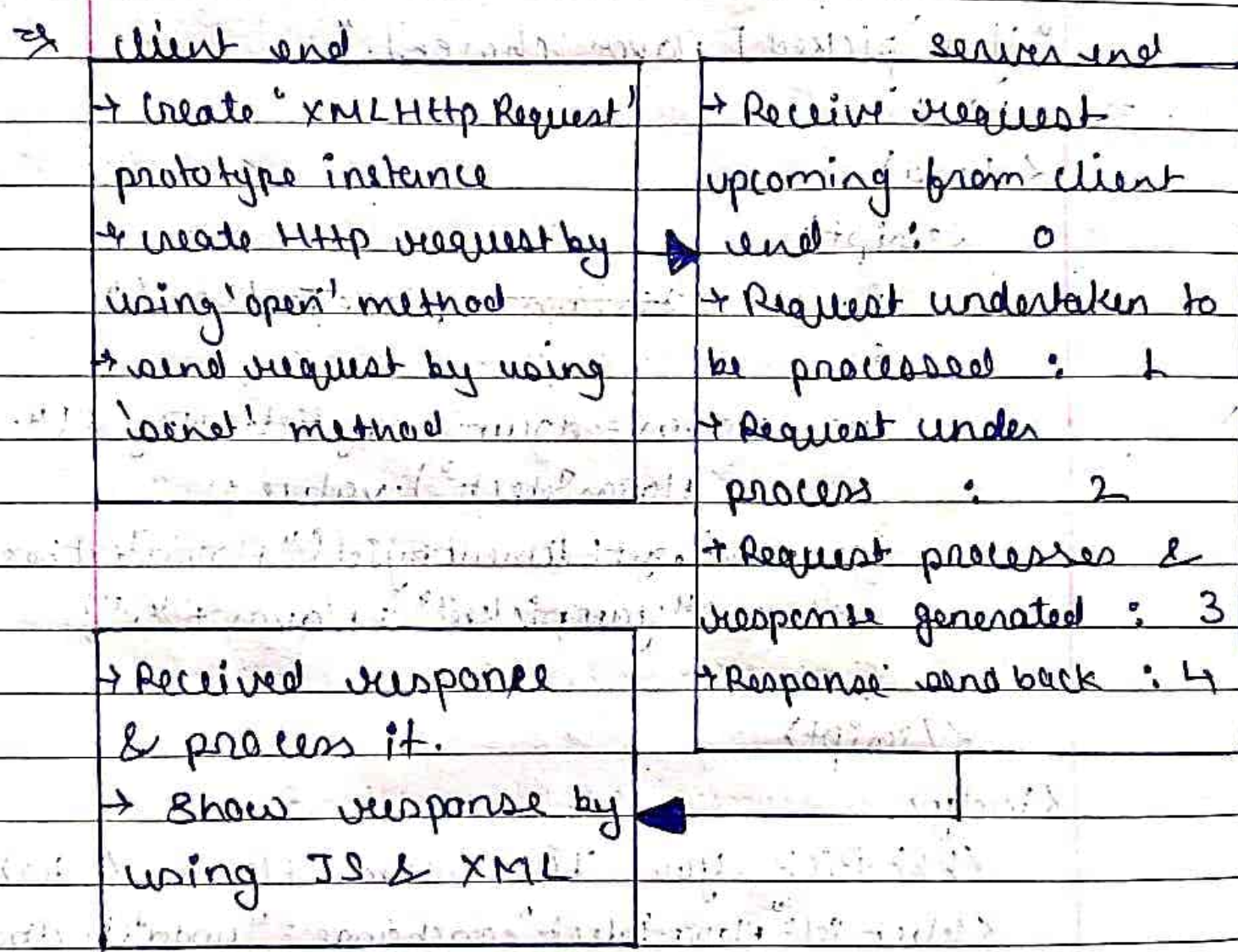
</html>

- 1) Have a select list of ice cream flavor & a textbox. When you select a flavor, the Textbox should display: "You picked [flavor chosen]."

```

⇒ <html>
  <head>
    <script>
      function textbox updateTextbox ()
      {
        var flavor = document.getElementById ("
          flavorSelect").value;
        document.getElementById ("FlavorTextbox").
          value = "You picked" + flavor + ".";
      }
    </script>
  <body>
    <h2> Pick Your Ice Cream Flavor </h2>
    <select id="FlavorSelect" onchange="updateTextbox()">
      <option value="Vanilla">Vanilla </option>
      <option value="chocolate">chocolate </option>
      <option value="mint">mint </option>
      <option value="strawberry">strawberry </option>
    </select>
    <br> <br>
    <input type="text" id="FlavorTextbox" readonly>
  </body>
</html>
  
```

(2) Explain AJAX life cycle.



* Response Headers:-

→ When client send request from client end to server and, server send response contain information.

1) onreadystatechange :- It is an event which is auto called and response will be back from server to client

2) Status :- it is response status

200 → OK

404 → page not found

3) readyState :- shows request processing status on server end, given by numbers.

0, 1, 2, 3, 4.

Note :- expected status will be equal to 200 & readyState will be equal to 4, for proper response.

4) responseText :- it response content from server to client as per request.

13) WAP to generate an AJAX code to take response from a URL & display output on a webpage.

```

<script>
function AJAXDemo()
{
    var xhttp = new XMLHttpRequest();
    var url = "https://api.myjson.com/bins/ms2yc";
    xhttp.open("GET", url, true);
    xhttp.send();

    xhttp.onreadystatechange = function() {
        if (xhttp.status == 200 && xhttp.readyState == 4)
        {
            document.getElementById("response").innerHTML = xhttp.responseText;
        }
    };
}
</script>
  
```