Q.1Using console.log() print out the following statement: The quote 'There is no exercise better for the heart than reaching down and lifting people up.' by John Holmes teaches us to help one another. Using console.log() print out the following quote by Mother Teresa:

Ans:: console.log(“The quote 'There is no exercise better for the heart than reaching down and lifting people up.' by John Holmes teaches us to help one another.”)

Q.2Check if typeof '10' is exactly equal to 10. If not make it exactly equal?

Ans:: if('10'===10){

document.write("it is exactaly equal")

}else{

document.write("it is not exactaly equal")

}

if(parseInt('10')===10){

document.write("it is exactaly equal")

}else{

document.write("it is not exactaly equal")

}

Q.3Write a JavaScript Program to find the area of a triangle?

Ans:: let oneside=10;

let secondside=10;

let thirdside=10

let s=(oneside+secondside+thirdside)/2;

console.log(s)//s is find but area me defined nahi ho raha

let area=parseInt(s(s-oneside)\*s(s-secondside)\*s(s-thirdside))

console.log(area)

Q.4Write a JavaScript program to calculate days left until next Christmas?

Ans::

Q.5 What is Condition Statement?

Ans:: condtional statement is control behavior in java script there are multiple diffrent type

of condtional statement including "if statement":whare condition is true it is used to specify

execution for block of code

Q.6 Find circumference of Rectangle formula : C = 4 \* a ?

Ans:: function rectengle(a){

return a\*4

}

console.log(rectengle(7))

Q.7 WAP to convert years into days and days into years?

<!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>

<label>days</label>

<input type="number" id="days"><br>

<label>year</label>

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

<button onclick="convert()">convert year</button>

<button onclick="covertyear()">convert year</button>

</body>

<script>

let convert=()=>{

let days=document.getElementById('days').value

let yeara=days/365

document.getElementById("year").value=yeara

}

let covertyear=()=>{

let year=document.getElementById("year").value

let dayss=year\*365

document.getElementById("days").value=dayss

}

</script>

</html>

Q.8 Convert temperature Fahrenheit to Celsius? (Conditional logic Question)

<!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>

<label>fernhit</label>

<input type="number" id="cal" readonly>

</body>

<script>

// let feranhit=9\5\*c+32

let cal=parseInt(prompt("enter the Celsius"))

let fernhit=(9/5)\*cal+32

document.getElementById("cal").value=fernhit

</script>

</html>

Q.9 Write a JavaScript exercise to get the extension of a filename.?

function paramiter(a){

const parts= a.split(".");

if(parts.length>1){

console.log(parts.pop())

}else{

console.log("plx enter valid file name")

}

}

console.log(paramiter("doc.pf"))

Q.10What is the result of the expression (5 > 3 && 2 < 4)?

Ans::true(1)

Q.11What is the result of the expression (true && 1 && "hello")?

Ans::hello

Q.12What is the result of the expression true && false || false && true?

Ans::false

Q.13Check Number Is Positive or Negative in JavaScript?

let num=parseInt(prompt("enter the number"))

if(num>0){

console.log("number is positive")

}else if(num<0){

console.log("number is negetive")

}else{

console.log("number is 0");

}

Q.14Find the Character Is Vowel or Not ?

let char=prompt("enter the char")

if(char=='a'||char=='e'||char=='i'||char=='o'||char=='u'||char=='A'||char=='E'||char=='I'||char=='O'||char=='U'){

console.log("it is vowel")

}else{

console.log("it is not vowel");

}

Q.15Write to check whether a number is negative, positive or zero?

let num=parseInt(prompt("enter the number"))

if(num>0){

console.log("number is positive")

}else if(num<0){

console.log("number is negetive")

}else{

console.log("number is 0");

}

Q.16Write to find number is even or odd using ternary operator in JS?

let num=parseInt(prompt("enter the number you want to enter"))

let ans=(num%2==0)?

console.log("it is even")

:

console.log("it is odd")

Q.17Write find maximum number among 3 numbers using ternary operator in JS?

let a=parseFloat(prompt("enter a"))

let b=parseFloat(prompt("enter b"))

let c=parseFloat(prompt("enter c"))

let ans=(a>b)?(a>c)?console.log("a is greter"):console.log("c is greter"):(b>c)?console.log("b is greter"):console.log("c is greter")

Q.18Write to find minimum number among 3 numbers using ternary operator in JS?

let a=parseFloat(prompt("enter a"))

let b=parseFloat(prompt("enter b"))

let c=parseFloat(prompt("enter c"))

let ans=(a<b)?(a<c)?console.log("a is mimum"):console.log("c is minimum"):(b<c)?console.log("b is minimum"):console.log("c is minimum")

Q.19Write to find the largest of three numbers in JS?

let a=parseFloat(prompt("enter a"))

let b=parseFloat(prompt("enter b"))

let c=parseFloat(prompt("enter c"))

if(a>=b){

if(a>=c){

console.log("a is greter")

}else{

if(a==c){

if(a==b && a==c){

console.log("a nd b and c is same");

}else if(a==b){

console.log("a and b greter")

}else if(a==c){

console.log("a and c greter")

}else{

console.log("b and c greter")

}

}else{

console.log("c is greter");

}

}

}else{

if(b>=c){

if(a==b){

if(a==b && a==c){

console.log("a nd b and c is same");

}else if(a==b){

console.log("a and b greter")

}else if(a==c){

console.log("a and c greter")

}else{

console.log("b and c greter")

}

}else{

console.log("b is greter");

}

}else{

if(a==c){

if(a==b && a==c){

console.log("a nd b and c is same");

}else if(a==b){

console.log("a and b greter")

}else if(a==c){

console.log("a and c greter")

}else{

console.log("b and c greter")

}

}else{

if(b==c){

if(a==b && a==c){

console.log("a nd b and c is same r");

}else if(a==b){

console.log("a and b greter")

}else if(a==c){

console.log("a and c greter")

}else{

console.log("b and c greter")

}

}else{

console.log("c is greter");

}

}

}

}

Q.20Write to show i. Monday to Sunday using switch case in JS? ii. Vowel or Consonant using switch case in JS

let days=parseInt(prompt("enter the number"))

switch(days){

case 1:

console.log("monday");

break;

case 2:

console.log("tuesday");

break;

case 3:

console.log("wednesday");

break;

case 4:

console.log("thrusday");

break;

case 5:

console.log("friday");

break;

case 6:

console.log("satruday");

break;

case 7:

console.log("sunday");

break;

default:

console.log("error");

}

let vowel=prompt("enter the number")

switch(vowel){

case 'a':

console.log("it is vowel");

break;

case 'e':

console.log("it is vowel");

break;

case 'i':

console.log("it is vowel");

break;

case 'o':

console.log("it is vowel");

break;

case 'u':

console.log("it is vowel");

break;

case 'A':

console.log("it is vowel");

break;

case 'E':

console.log("it is vowel");

break;

case 'I':

console.log("it is vowel");

break;

case 'O':

console.log("it is vowel");

break;

case 'U':

console.log("it is vowel");

break;

default:

console.log("it is not vowel");

}

Q.21What are the looping structures in JavaScript? Any one Example?

Ans:: Loops in JavaScript execute a block of code again and again while the condition is true.example::

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

console.log("Hello World!");

}

Q.22Write a print 972 to 897 using for loop in JS?

for(i=972;i>=897;i--){

console.log(i)

}

Q.23Write to print factorial of given number?

let number=parseInt(prompt("enter the number"))

mul=1;

for(i=number;i>=2;i--){

mul=mul\*i;

}

console.log(mul);

Q.24Write to print Fibonacci series up to given numbers?

let number=parseInt(prompt("enter the number"))

let t1=0

let t2=1

let ans

console.log(t1);

console.log(t2);

for(i=3;i<=number;i++){

let ans=t1+t2

console.log(ans);

t1=t2

t2=ans

}

Q.25Write to print number in reverse order e.g.: number = 64728 ---> reverse =82746 in JS?

let number=prompt("enter the number")

let rev=number.toString().split('').reverse().join('')

console.log(rev)

Q.26Write a program make a summation of given number (E.g., 1523 Ans: - 11) in JS?

let arr=parseInt(prompt("enter the number"))

let ans=arr.toString().split('').reduce((curr,i)=>{

return curr+parseInt(i)

},0)

console.log(ans);

Q.27 Write a program you have to make a summation of first and last Digit. (E.g., 1234 Ans: - 5) in JS?

let arr=parseInt(prompt("enter the number"))

let ans=arr.toString().split('')

let fristde=parseInt(ans[0])

let lastd=parseInt(ans[ans.length-1])

let sum=fristde+lastd

console.log(sum)

Q.28Use console.log() and escape characters to print the following pattern in JS?

1 1 1 1 1

console.log("1\ 1\ 1\ 1")

2 1 2 4 8

console.log("2\ 1\ 2\ 4\ 8")

3 1 3 9 27

console.log("3\ 1\ 3\ 9\ 27")

4 1 4 16 64

console.log("4\ 1\ 4\ 16\ 27")

5 1 5 25 125

console.log("5\ 1\ 5\ 25\ 125")

.29Use pattern in console.log in JS? 1)

1

1 0

1 0 1

1 0 1 0

1 0 1 0 1

console.log(" 1");

console.log("1 0");

console.log("1 O 1");

console.log("1 O 1 O");

console.log("1 O 1 0 1");

2) A

B C D

E F

G H I J

K L M N O

console.log("A");

console.log("B C D");

console.log("E F");

console.log("G H I J");

console.log("K L M N O");

3)

1

2 3

4 5 6

7 8 9 10

11 12 13 14 15

console.log("1");

console.log("2 3");

console.log("4 5 6");

console.log("7 8 9 1O");

console.log("11 12 13 14 15");

4)

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

console.log("\*");

console.log("\* \*");

console.log("\* \* \*");

console.log("\* \* \* \*");

console.log("\* \* \* \* \*");

Q.30 Accept 3 numbers from user using while loop and check each numbers palindrome

let no=parseInt(prompt("enter the number"))

let f=no

let res=0;

while(no>0){

let num=no%10;

let ans=(num\*10)+num

let num2=Math.floor(no/10);

}

if(f==ans)

console.log("it is palidrom")

else

console.log("it is not palidrom")

Q.31 Write a JavaScript Program to display the current day and time in the following format. Sample Output: Today is Friday. Current Time is 12 PM: 12 : 22 2 ?

function mydate(){

const days = ["Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday"];

let now= new Date()

let currentdate=days[now.getDay()]

let hours = now.getHours();

let minutes = now.getMinutes();

let seconds = now.getSeconds();

let ampm=hours>=12?"pm":"am";

const formattedTime = `${hours} ${ampm}: ${minutes} : ${seconds}`;

console.log(`Today is ${currentdate}. Current Time is ${formattedTime}`);

}

mydate()

Q.32Write a JavaScript program to get the current date?

<!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>

<div class="cointer" style="display: flex; gap:4px">

<div id="date"></div>

<div id="month"></div>

<div id="year"></div>

</div>

</body>

<script>

var today = new Date();

let day=(today.getDate());

let month=(today.getMonth());

let year=(today.getFullYear());

document.getElementById("date").innerHTML=day+"/"

document.getElementById("month").innerHTML=month+"/"

document.getElementById("year").innerHTML=year

</script>

</html>

Q.33Write a JavaScript program to compare two objects?

let a={

name:'bansi',

age:35

}

let b={

name:'sumit',

age:37

}

console.log(JSON.stringify(a)===JSON.stringify(b))

Q.34Write a JavaScript program to convert an array of objects into CSV string?

Q.35Write a JavaScript program to capitalize first letter of a string?

let str="bansi"

let ans=str.slice(0,1).toUpperCase()

let ans1=str.slice(1)

console.log(ans+ans1);

Q. 45 Write a JavaScript program to determine if a variable is array?

function array(a){

return Array.isArray(a)

}

let arr=[12,13,14]

let arr2="bansi"

console.log(array(arr));

console.log(array(arr2));

Q.46 Write a JavaScript program to clone an array?

let arr=[12,13,1,15,16]

let newarr=[...arr]

newarr[0]=100;//it not change origanla array

console.log(arr);

console.log(newarr);

Q.47 What is the drawback of declaring methods directly in JavaScript objects?

let obj={

a:function(){

console.log("it is obj ");

}

}

let obj2={

a:function(){

console.log("it is obj ");

}

}

console.log(obj.a===obj2.a);

Q.48 Print the length of the string on the browser console using console.log()?

let str="bansi"

console.log(str.length);

Q.49 Change all the string characters to capital letters using toUpperCase() method?

let str="bansi"

console.log(str.toUpperCase());

Q.50 What is the drawback of declaring methods directly in JavaScript objects

let obj={

a:function(){

console.log("it is obj ");

}

}

let obj2={

a:function(){

console.log("it is obj ");

}

}

console.log(obj.a===obj2.a);

Q.51 Write a JavaScript program to get the current date. Expected Output : mm-dd-yyyy, mm/dd/yyyy or dd-mm-yyyy, dd/mm/yyyy?

var today = new Date();

let day=(today.getDate());

let month=(today.getMonth());

let year=(today.getFullYear());

const formate={

'mm-dd-yyyy': `${month}-${day}-${year}`,

'mm/dd/yyyy': `${month}/${day}/${year}`,

'dd-mm-yyyy': `${day}-${month}-${year}`,

'dd/mm/yyyy': `${day}/${month}/${year}`

}

console.log(formate);

Q.52 Use indexOf to determine the position of the first occurrence of a in 30 Days Of JavaScript?

let str= "30 Days Of JavaScript"

let ans=str.indexOf('a')

console.log(ans);

Q,53 Use lastIndexOf to determine the position of the last occurrence of a in 30 Days Of JavaScript?

let str= "30 Days Of JavaScript"

let ans=str.lastIndexOf('a')

console.log(ans);

Q.54 Form Validtion in JS?

**Form validation in JavaScript** is the process of checking the input data submitted by users in web forms to ensure it meets certain criteria before being processed or sent to a server.

Q.55 Form in Email, number, Password, Validation?

Form validation for email, number, and password is the process of checking user inputs in a web form to ensure they meet specific criteria before the form is submitted. Each type of input has its own validation requirements based on what is considered acceptable data.

Q.56 Dynamic Form Validation in JS?

Dynamic form validation in JavaScript involves validating form inputs based on user interactions in real time. This means that as users type or select options, the validation logic responds immediately, providing feedback and ensuring that the data entered meets specified criteria.

Q.57 how many type of JS Event? How to use it ?

There are many type of js event like mouse event ,form event,keyboard event .etc

Example:: <!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-QWTKZyjpPEjISv5WaRU9OFeRpok6YctnYmDr5pNlyT2bRjXh0JMhjY6hW+ALEwIH" crossorigin="anonymous">

</head>

<body>

<button class="btn btn-success" id="btn"> btn</button>

</body>

<script>

document.getElementById("btn").addEventListener("click",function(){

alert("btn was click")

})

</script>

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-YvpcrYf0tY3lHB60NNkmXc5s9fDVZLESaAA55NDzOxhy9GkcIdslK1eN7N6jIeHz" crossorigin="anonymous"></script>

</html>

Q.59 What is Bom vs Dom in JS?

### **BOM vs. DOM: Key Differences**

|  |  |  |
| --- | --- | --- |
| **Aspect** | **DOM (Document Object Model)** | **BOM (Browser Object Model)** |
| **Purpose** | Represents the document structure and content. | Represents the browser and its features. |
| **Interaction** | Allows manipulation of HTML and XML documents. | Allows interaction with the browser window and its properties. |
| **Key Objects** | document, element, text, etc. | window, navigator, location, history, etc. |
| **Standardization** | Standardized across all modern browsers. | Less standardized, with some variations between browsers. |
| **Focus** | Focuses on the content of the web page. | Focuses on the environment in which the web page is displayed. |

Q.60 Array vs object defences in JS?

* **Array**: An array is an ordered collection of elements, where each element can be accessed by its numeric index. Arrays are typically used when the order of elements is important or when you need to store a list of items.exmple arr[12,13,14]
* **Object**: An object is a collection of key-value pairs, where each key (or property) is a string (or Symbol) that maps to a value. Objects are typically used for storing data with properties and methods.obj={ name:bansi,age:23}

Q.61 Split the string into an array using split() Method?

const str = "apple,banana,orange";

const fruitsArray = str.split(",");

console.log(fruitsArray);

Q.62 Check if the string contains a word Script using includes() method?

const str = "JavaScript is a versatile programming language.";

console.log(str.includes("script"));

console.log(str.includes("Java"));

Q.63 Change all the string characters to lowercase letters using toLowerCase() Method.

let str="BANSI";

let ans=str.toLowerCase()

console.log(ans);

Q.64 What is Character at index 15 in ’30 Days of JavaScript’ string? Use charAt() method.

const str = "30 Days of JavaScript";

const characterAtIndex15 = str.charAt(15);

console.log("Character at index 15:", characterAtIndex15);//s

Q.65 copy to one string to another string in JS?

let str="bansi"

newstr=str;

console.log(newstr);