**JavaScript Practical’s 01:**

**//Area of triangle,rectangle ,circle**

let b=parseInt(prompt("Enter the base "))

let h=parseInt(prompt("Enter the height "))

area\_of\_triangle=0.5 \* b \*h

console.log("area of triangle",area\_of\_triangle)

let l=parseInt(prompt("Enter the length "))

let bd=parseInt(prompt("Enter the breadth "))

area\_of\_rect= l\* bd

console.log("area of triangle",area\_of\_rect)

let r=parseInt(prompt("Enter radius of circle"))

area\_of\_circle=3.14 \* r \*r

console.log("area of circle ", area\_of\_circle)

**JavaScript Practical’s 02:**

**//multiplication table**

var n =parseInt(prompt("Enter a Number"))

for(let i=1;i<=10;i++)

{

console.log(n+ "\*" +i, "=",+n\*i)

}

**JavaScript Practical’s 03:**

**//1)reverse string**

function reverseString(str)

{

let newStr=""

for(let i=str.length-1;i>=0;i--)

{

newStr += str[i];

}

return newStr;

}

var str=prompt("Enter a string")

result =reverseString(str);

console.log(result)

**// 2)Replace character of string**

let s="Ajinkya Ajit Jadhav"

let result=s.replace("Ajinkya","vallabh")

console.log(result)

**//3)Palindrome String**

let newStr=""

function Palindrome(str){

for(let i=str.length-1;i>=0;i--){

newStr += str[i];

}

if(newStr == str)

{

return 1;

}

return 0;

}

var str=prompt("Enter a string")

console.log(Palindrome(str))

**JavaScript Practical’s 04:**

**//string**

console.log("concept of String equality")

var s1=8

var s2="8"

console.log(s1==s2)

var s1=8

var s2="8"

console.log(s1===s2)

console.log("string length comparison")

var str1="Ajinkya"

var str2="Ankit"

console.log(str1.length > str2.length)

console.log(str1.length < str2.length)

console.log(" comapre string using localeCompare() ")

var s1="Ajinkya"

var s2="Ajinkya"

console.log(s1.localeCompare(s2))

var s3="Ankit"

var s4="Ajinkya"

console.log(s3.localeCompare(s4))

**JavaScript Practical’s 05:**

**//create countdown program**

var x = setInterval(function() {

// Set the date we're counting down to

var countDownDate = new Date("sept 21, 2023 13:10:25").getTime()

// Get today's date and time

var now = new Date().getTime()

// Find the distance between now and the count down date

var distance = countDownDate - now;

// Time calculations for days, hours, minutes and seconds

var days = Math.floor(distance / (1000 \* 60 \* 60 \* 24));

var hours = Math.floor((distance % (1000 \* 60 \* 60 \* 24)) / (1000 \* 60 \* 60));

var minutes = Math.floor((distance % (1000 \* 60 \* 60)) / (1000 \* 60));

var seconds = Math.floor((distance % (1000 \* 60)) / 1000);

console.log(days+" day "+hours+" hr "+minutes+" min "+seconds+" sec ")

if (distance < 0) {

clearInterval(x);

console.log("CountDown Finished");

}

},200);

**JavaScript Practical’s 06:**

**//Array operations**

console.log("Removing Elements From array using pop()method")

//Removing Elements From array using pop()method

let arr=[1,2,23,34]

arr.pop();

console.log(arr)

//Removing Elements From array using Shift() method

console.log("Removing Elements From array using Shift() method")

let arr1=[1,2,3,4,5]

arr1.shift();

console.log(arr1)

//To check array contains specified value or not

console.log("To check array contains specified value or not")

let arr2=[1,2,3,4,5]

let res= arr2.includes(2)

console.log(res)

let arr3=[1,2,3,4,5]

let res2= arr.indexOf(2)

console.log(res2)

//To empty an array

console.log("TO empty an Array ")

function EmptArry(myarr)

{

myarr=[]

return myarr

}

const array = [1,2,3]

console.log(array)

const res3= EmptArry(array)

console.log(res3)

**JavaScript Practical’s 07:**

**//set operations**

**//union**

function union (a,b){

let unionSet =new Set(a)

for(i of b){

unionSet.add(i);

}

return unionSet

}

const setA=new Set(['Ajinkya','Darshan','Pratik','Ankit'])

const setB=new Set(['Tejal','Anushka','Ankit'])

console.log(union(setA,setB))

**//intersection**

function intersection(A,B){

let interSet =new Set();

for(let i of B){

if(A.has(i)){

interSet.add(i);

}

}

return interSet

}

const setA=new Set(['Ajinkya','Darshan','Pratik','Ankit'])

const setB=new Set(['Tejal','Anushka','Ankit'])

console.log(intersection(setA,setB))

**//difference operations**

function difference(a,b){

let differ=new Set(b)

for(let i of a)

{

differ.delete(i);

}

return differ

}

const setA=new Set(['Ajinkya','Darshan','Pratik','Ankit'])

const setB=new Set(['Tejal','Anushka','Ankit'])

console.log(difference(setA,setB))

**//set subset operations**

function subSet(a,b){

for(let i of b)

{

if(!a.has(i))

{

return false

}

}

return true;

}

const setA=new Set(['Ajinkya','Darshan','Pratik','Ankit'])

const setB=new Set(['Ajinkya','Darshan'])

console.log(subSet(setA,setB))

**JavaScript Practical’s 08:**

**//mouse over event**

<html>

<head>

<script>

/\* script to set background color \*/

function COLOR() {

document.body.style.backgroundColor ="Red";

}

</script>

</head>

<button type="button" onmouseover="COLOR()">

Button

</button>

</body>

</html>

**//on focus Event**

<html>

<head>

<script>

/\* script to set background color \*/

function COLOR() {

document.body.style.backgroundColor ="Red";

}

</script>

</head>

<button type="button" onfocus="COLOR()">

Button

</button>

</body>

</html>

**JavaScript Practical’s 09:**

**//student registration form**

<html>

<head>

<title> Student Registration Form </title>

<script type="text/javascript">

function validate(){

if(document.myForm.First\_Name.value=="")

{

alert("Please provide First Name !");

document.myForm.First\_Name.focus(); return false;

}

if(document.myForm.Last\_Name.value=="")

{

alert("Please provide Last Name !");

document.myForm.Last\_Name.focus(); return

false;

}

if(document.myForm.Mobile.value=="")

{

alert("Please provide mobile number !!");

document.myForm.Mobile.focus();

return false;

}

if(document.myForm.Email.value=="")

{

alert("Please provide valid Email !!");

document.myForm.Email.focus();

return false;

}

if(document.myForm.Password.value==""){

alert("Please Enter Password !!");

document.myForm.Password.focus();

return false;

}

return(true);

}

</script>

</head>

<body>

<form action = "#" name = "myForm" onSubmit = "return (validate())";>

<h3 align = "center"> STUDENT REGISTRATION FORM

</h3><table align = "center" cellpadding="9">

<tr>

<td> First Name : </td>

<td>

<input type = "text" name ="First\_Name" placeholder="First Name" /></td>

</tr>

<tr>

<td> Last Name : </td>

<td>

<input type = "text" name ="Last\_Name" placeholder="Last Name" /></td>

</tr>

<tr>

<td>Moblie No. </td>

<td>

<input type="text" name="Mobile" placeholder="Moblie Number" /></td>

</tr>

<tr>

<td> Email : </td>

<td><input type="text" name="Email" placeholder="Email Id" /></td>

</tr>

<tr>

<td> Password : </td>

<td>

<input type="Password"

name="Password"

placeholder="Password" />

</td>

</tr>

<tr>

<td>

<input type="submit" value="Submit">

</td>

</tr>

</table>

</form>

</body>

</html>

**JavaScript Practical’s 10:**

**//recursion function**

function countDown(number)

{

if(number ==0)

{

return;

}

console.log(number)

countDown(number -1)

}

countDown(4);