Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

\_\_\_\_\_\_\_6\_\_\_\_\_\_\_

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| 1 | **Create a function that calulates the power of 100 of a number entered as a parameter.** |
| 2 | **Write a javascript function that takes an array of numbers and a target number. The function should find two different numbers in the array that, when added together, give the target number. For example: answer([1,2,3], 4) should return [1,3].** |
| 3 | **Write a javascript function and ask user to enter the age, this function aim to show a message that a person can drive, if the age is greater than or equal to 18 otherwise can’t drive, by using a ternary operator instead of the**[**if-else**](https://www.javascripttutorial.net/javascript-if-else/)**statement.** |
| 4 | **Using switch in javascript, write a program to create any four browsers cases of your choice and generate alert (“I am using xyz browser) if user select any one of them.** |
| 5 | **Write a javascript arrow function named calculateSupply that:**   * 1. **takes 2 arguments: age, amount per day.**   2. **calculates the amount consumed for rest of the life (based on a constant max age).**   3. **outputs the result to the screen like so: "You will need NN to last you until the ripe old age of X"** |
| 6 | **Design a Registration form using Bootstrap and validate it using Javascript** |
|  |  |
|  |  |

Submitted On:

\_12-12-2022\_\_

(Date: DD/MM/YY)

**LAB # 06**

**Task # 01: Create a function that calculates the power of 100 of a number entered as a parameter.**

**Solution:**

**HTML CODE:**

<body>

    <label for="">Enter a Number: </label>

    <input type="text" id="num" style="margin-left: 47px;"><br><br>

    <label for="">100 Power of a number:</label>

    <input type="text" id="pow" readonly><br><br>

    <input type="button" value="Calculate" onclick="fun()">

    <script src="task1.js"></script>

</body>

**JS CODE:**

let fun=()=>{

    var num=+document.getElementById("num").value

    func(num);

}

let func=(n)=>{

    let p=1;

    for(var i=0;i<100;i++){

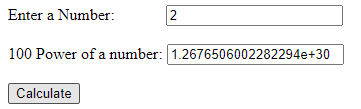
        p\*=n;

    }

    document.getElementById("pow").value=p;

}

**Output:**



**Task # 02: Write a javascript function that takes an array of numbers and a target number. The function should find two different numbers in the array that, when added together, give the target number. For example: answer([1,2,3], 4) should return [1,3].**

**Solution:**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

    <title>Document</title>

</head>

<body>

    <h1>Task 2</h1>

    <label for="text">Enter Number: </label>

    <input type="text" id="text">

    <input type="button" value="Add Element" onclick="Add()">

    <input type="button" value="Set Target" onclick="Target()">

    <p id="arr"><b>Array: </b>Empty</p>

    <p id="tar"><b>Target: </b>0</p>

    <input type="button" value="Check Pair" onclick="Pair()">

    <h2>Pairs: </h2>

    <p id="pair">No Pair Checked</p>

    <ol id="myList"></ol>

    <script>

        var arr=[]

        var tar\_value=0;

        let Add=()=>{

        let val=+document.getElementById("text").value

        arr.push(val)

        document.getElementById("text").value=""

        document.getElementById("arr").innerHTML="<p><b>Array: </b>"+arr+"</p>"

        }

        let Target=()=>{

        tar\_value=+document.getElementById("text").value

        document.getElementById("tar").innerHTML="<p><b>Target: </b>"+tar\_value+"</p>"

        document.getElementById("text").value=""

        }

        let Pair=()=>{

            fun(arr,tar\_value)

        }

        let fun=(array,target)=>{

        let p\_i=0;

        let temp=0

        for(var i=0;i<array.length;i++){

            for(var j=i+1;j<array.length;j++)

            {

                if(((array[i]+array[j])==target))

                {

                    document.getElementById("pair").style.display="none"

                    var li=document.createElement("LI")

                    var input="["+array[i]+","+array[j]+"]"

                    var t=document.createTextNode(input)

                    li.appendChild(t)

                    document.getElementById("myList").appendChild(li);

                }

                if(temp==0){

                    document.getElementById("pair").innerHTML="No Pair Found"

                }

                }

            }

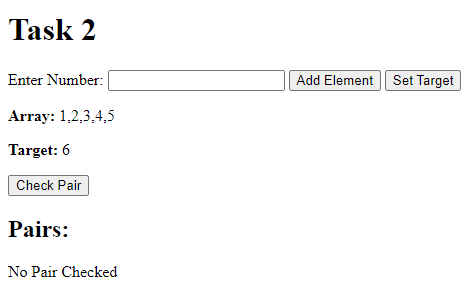
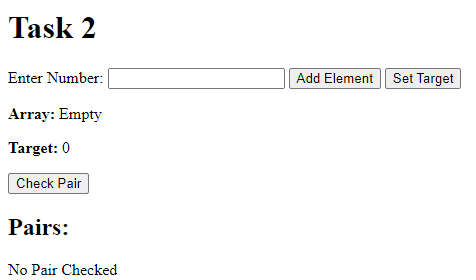
        }

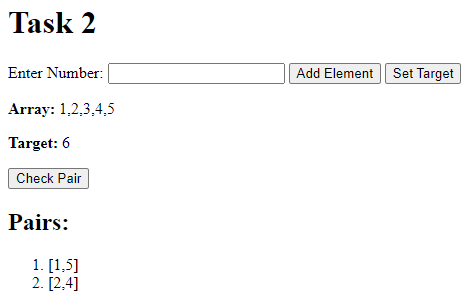
    </script>

</body>

</html>

**Output:**





**Task # 03: Write a javascript function and ask user to enter the age, this function aim to show a message that a person can drive, if the age is greater than or equal to 18 otherwise can’t drive, by using a ternary operator instead of the**[**if-else**](https://www.javascripttutorial.net/javascript-if-else/)**statement.**

**Solution:**

<body>

    <script>

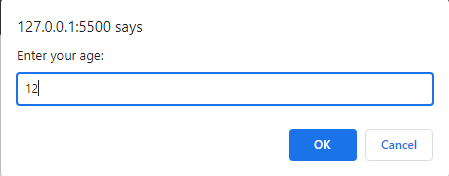
        var age=+prompt("Enter your age:")

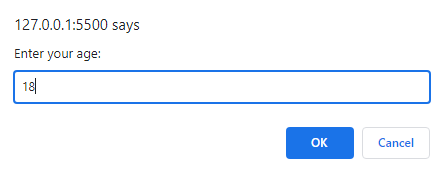
        age>=18?alert("You can drive"):alert("You can't drive")

    </script>

</body>

**Output:**

**Task # 04: Using switch in javascript, write a program to create any four browsers cases of your choice and generate alert (“I am using xyz browser) if user select any one of them.**

**Solution:**

<body>

    <h2>Browser Lists</h2>

    <input type="radio" name="b\_list" id="opera" value="1">

    <label for="opera">Opera</label>

    <input type="radio" name="b\_list" id="chrome" value="2">

    <label for="chrome">Chrome</label>

    <input type="radio" name="b\_list" id="edge" value="3">

    <label for="edge">Edge</label>

    <input type="radio" name="b\_list" id="mozila" value="4">

    <label for="mozila">Mozila</label><br>

    <input type="button" onclick="Browser()" value="Select">

    <script>

        let Browser=()=>{

            var ele=document.getElementsByName("b\_list")

            var val=0;

            for(var i=0;i<ele.length;i++){

                if(ele[i].checked){

                    val=+ele[i].value;

                    break;

                }

            }

            console.log(val)

            switch(val){

                case 1:

                    alert("I am using Opera")

                    break;

                case 2:

                    alert("I am using Chrome")

                    break;

                case 3:

                    alert("I am using Edge")

                    break;

                case 4:

                    alert("I am using Mozila")

                    break;

                default:

                    break;

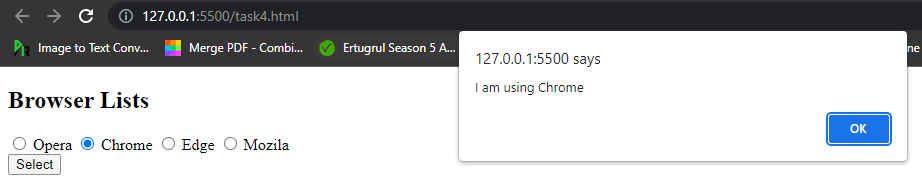
            }

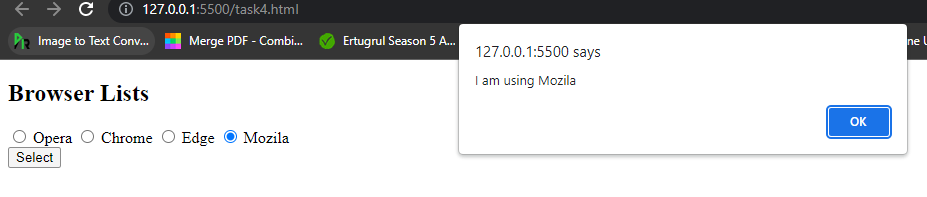
        }

    </script>

</body>

**Output:**





**Task # 05: Write a javascript arrow function named calculateSupply that:**

* 1. **takes 2 arguments: age, amount per day.**
  2. **calculates the amount consumed for rest of the life (based on a constant max age).**
  3. **outputs the result to the screen like so: "You will need NN to last you until the ripe old age of X"**

**Solution:**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

    <title>Document</title>

</head>

<body>

    <label for="age">Enter Age: </label>

    <input type="text" id="age" style="margin-left: 25px;"><br><br>

    <label for="amount">Enter Amount: </label>

    <input type="text" id="amount"><br><br>

    <input type="button" value="Calculate" onclick="Calculate()">

    <p id="demo"></p>

    <script>

        const max\_age=100

        var age=0

        var amount=0

        let Calculate=()=>{

            calculateSupply(age,amount)

        }

        let calculateSupply=(age,amount\_per\_day)=>{

            age=+document.getElementById("age").value

            amount\_per\_day=+document.getElementById("amount").value

            let rest\_life=(max\_age-age)\*amount\_per\_day\*365

            document.getElementById("demo").innerHTML="<p ><b>Amount consumed for rest of life: </b>"+"Rs "+rest\_life+"</p>"

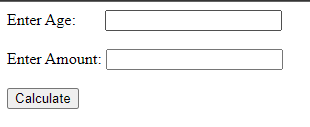
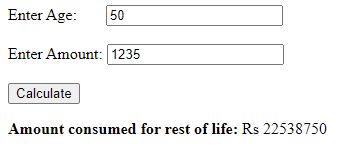
        }

    </script>

</body>

</html>

**Output:**

**Task # 06: Design a Registration form using Bootstrap and validate it using Javascript**

**Solution:**

<!DOCTYPE html>

<html lang="en">

<head>

    <title>Document</title>

    <style>

        label{

            font-weight: bold;

        }

    </style>

    <link rel="stylesheet" href="./bootstrap-5.1.3-dist/css/bootstrap.min.css">

    <script src="./bootstrap-5.1.3-dist/js/bootstrap.min.js"></script>

</head>

<body>

    <form name="newForm" onsubmit="return formValidation()" class="container">

        <h1>Registration Form</h1>

        <div class="mb-3">

          <label for="fullname" class="form-label">Full Name:</label>

          <input type="text" class="form-control" id="fullname" >

          <p id="namecaption" style="color: rgb(231, 53, 53);display: none;">Enter full name</p>

        </div>

        <div class="mb-3">

            <label for="email" class="form-label">Email Address:</label>

            <input type="text" class="form-control" id="email" >

            <p id="emailCaption" style="color: rgb(231, 53, 53);display: none;">Enter Email Address</p>

          </div>

        <div class="mb-3">

            <label for="PhoneNo" class="form-label">PhoneNo:</label>

            <input type="text" class="form-control" id="PhoneNo" >

            <p id="phoneCaption" style="color: rgb(231, 53, 53);display: none;">Enter Phone Number</p>

          </div>

          <div class="mb-3">

            <label for="Password" class="form-label">Password:</label>

            <input type="password" class="form-control" id="Password" >

            <p id="passwordCaption" style="color: rgb(231, 53, 53);display: none;">Enter Password</p>

          </div>

          <div class="mb-3">

            <label for="cPassword" class="form-label">Confirm Password:</label>

            <input type="password" class="form-control" id="cPassword" >

            <p id="cpasswordCaption" style="color: rgb(231, 53, 53);display: none;">Enter Password Confirmation</p>

          </div>

        <button type="submit" class="btn btn-primary">Submit</button>

      </form>

    <script>

        function formValidation(){

            var x=0

            var fullname=document.getElementById("fullname").value

            var email=document.getElementById("email").value

            var phone=document.getElementById("PhoneNo").value

            var pass=document.getElementById("Password").value

            var cpass=document.getElementById("cPassword").value

            var phone\_no = /^\(?([0-9]{3})\)?[-. ]?([0-9]{3})[-. ]?([0-9]{4})$/;

            var mailformat = /^\w+([\.-]?\w+)\*@\w+([\.-]?\w+)\*(\.\w{2,3})+$/;

            if(fullname!=''){

                x=0

                document.getElementById('namecaption').style.display="none"

            }

            if(email.match(mailformat)){

                x=0

                document.getElementById('emailCaption').style.display="none"

            }

            if(phone.match(phone\_no)){

                x=0

                document.getElementById('phoneCaption').style.display="none"

            }

            if(pass!=''){

                x=0

                document.getElementById('passwordCaption').style.display="none"

            }

            if(cpass!=''){

                x=0

                document.getElementById('cpasswordCaption').style.display="none"

            }

            if(fullname==''){

                x=1

                document.getElementById('namecaption').style.display="block"

            }

            if(!(email.match(mailformat))){

                x=1

                document.getElementById('emailCaption').style.display="block"

            }

            if(!(phone.match(phone\_no))){

                x=1

                document.getElementById('phoneCaption').style.display="block"

            }

            if(pass==''){

                x=1

                document.getElementById('passwordCaption').style.display="block"

            }

            if(cpass==''){

                x=1

                document.getElementById('cpasswordCaption').style.display="block"

            }

            if(x==1){

                return false

            }

            else if(x==0){

                return true

            }

        }

    </script>

</body>

</html>

**Output:**



