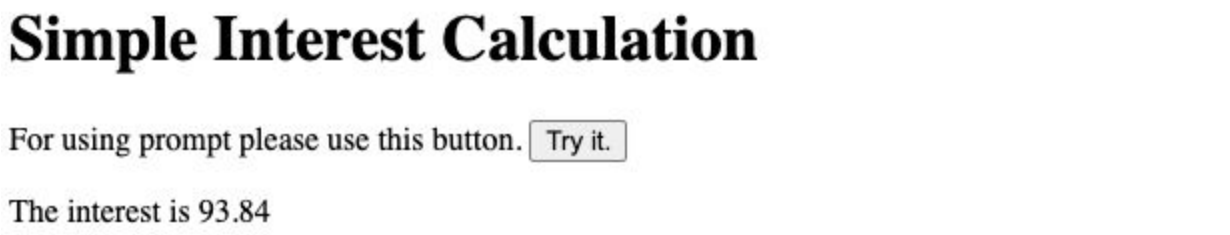
1.Prompt for amount, interest rate and no. of years and calculate simple interest.

ANS - The code of the question is attached with the assignment. File name is calculatorSI.html



2. Is palindrome string

```
> function palindrome(str) {

      var len = str.length;
      var mid = Math.floor(len/2);

      for ( var i = 0; i < mid; i++ ) {
          if (str[i] !== str[len - 1 - i]) {
              console.log("The string is not palindrome");
          }
      }

      console.log("The string is palindrome");
  }

  palindrome("daad");
  The string is palindrome
< undefined
```

3. Area of circle

```
> function circle_area(radius){
  this.radius = radius;
  console.log(Math.PI * this.radius * this.radius);
  }

  circle_area(25);
  1963.4954084936207
< undefined
```

4. Copy information of one object to another and log it to the console.

```
> var obj = {
  R: "Rahul",
  S: "working",
  };
  let cpy = obj;

  obj.S = "Sharma";
  console.log(cpy.S);
  Sharma
< undefined
```

5. create a list of objects of Employee with info as follow :

- Name, age, salary ,DOB and filter all employees with salary greater than 50000

```
> var list = [
      { name: "Anand", age: 30, salary: 20055, DOB: "01/01/2001" },
      { name: "Anushri", age: 30, salary: 20053, DOB: "02/01/2001" },
      { name: "Sushmita", age: 30, salary: 65652, DOB: "03/01/2001" },
      { name: "Mayank", age: 30, salary: 36734, DOB: "04/01/2001" }
  ];
< undefined
> len=list.length;
< 4
> for(var i=0; i<len; i++)if(list[i].salary>=50000)console.log(list[i].name);
  Sushmita
< undefined
```

- group employee on the basis of their age

```
> var list = [
      { name: "Anand", age: 30, salary: 20055, DOB: "01/01/2001" },
      { name: "Anushri", age: 30, salary: 20053, DOB: "02/01/2001" },
      { name: "Sushmita", age: 33, salary: 65652, DOB: "03/01/2001" },
      { name: "Mayank", age: 33, salary: 36734, DOB: "04/01/2001" }
  ];
< undefined
> function groupBy(array_list, property_salary) {
      var i = 0, val, index,
          values = [], result = [];
      for (; i < array_list.length; i++) {
          val = array_list[i][property_salary];
          index = values.indexOf(val);
          if (index > -1)
              result[index].push(array_list[i]);
          else {
              values.push(val);
              result.push([array_list[i]]);
          }
      }
      return result;
  }

  var obj = groupBy(list, "age");
< undefined
> console.log(obj);
  ▼ (2) [Array(2), Array(2)]
    ▼ 0: Array(2)
      ▶ 0: {name: "Anand", age: 30, salary: 20055, DOB: "01/01/2001"}
      ▶ 1: {name: "Anushri", age: 30, salary: 20053, DOB: "02/01/2001"}
        length: 2
      ▶ __proto__: Array(0)
    ▼ 1: Array(2)
      ▶ 0: {name: "Sushmita", age: 33, salary: 65652, DOB: "03/01/2001"}
      ▶ 1: {name: "Mayank", age: 33, salary: 36734, DOB: "04/01/2001"}
        length: 2
      ▶ __proto__: Array(0)
      length: 2
```

- fetch employees with salary less than 1000 and age greater than 20. Then give them an increment 5 times their salary.

```
> var list = [
      { name: "Anand", age: 30, salary: 500, DOB: "01/01/2001" },
      { name: "Anushri", age: 30, salary: 20053, DOB: "02/01/2001" },
      { name: "Sushmita", age: 33, salary: 65652, DOB: "03/01/2001" },
      { name: "Mayank", age: 33, salary: 600, DOB: "04/01/2001" }
  ];
< undefined
> len=list.length;
< 4
> var filtered_list = [];
< undefined
> for(var i=0; i<len; i++)if(list[i].salary<1000 && list[i].age>20)filtered_list.push(list[i]);
< 2
> len1=filtered_list.length;
< 2
> for(var k=0; k<len1; k++)filtered_list[k].salary *= 5;
< 3000
> filtered_list
< ▼ (2) [{…}, {…}]
    ▶ 0: {name: "Anand", age: 30, salary: 2500, DOB: "01/01/2001"}
    ▶ 1: {name: "Mayank", age: 33, salary: 3000, DOB: "04/01/2001"}
      length: 2
    ▶ __proto__: Array(0)
```