

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: 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
```