

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

Simple Interest Calculation

For using prompt please use this button.

The interest is 93.84

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
```