Exercise for Introduction to Javascript

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

Si.html

```
<!DOCTYPE html>
<html>
<head>
   <title>Simple Interest</title>
</head>
<body>
   <script type="text/javascript" src="si.js"></script>
</body>
</html>
```

Si.js

```
(function() {
  'use strict';
var p=prompt("Enter The Principle Amount= ");
var r=prompt("Enter The Rate of Interest= ");
var t=prompt("Enter The Number of Years= ");
var si=(p*r*t)/100;
alert("Simple Interest = " +si);
}());
```

Output:

This page says

Enter The Principle Amount=

10000

Cancel   OK

This page says

Enter The Rate of Interest=

20

Cancel   OK

This page says

Enter The Number of Years=

2

Cancel   OK

This page says

Simple Interest = 4000

OK

2. is palindrome string

Palindrome.html

```html
<!DOCTYPE html>
<html>
<head>
   <title>Palindrome String</title>
</head>
<body>
   <script type="text/javascript" src="palindrome.js"></script>
</body>
</html>
```
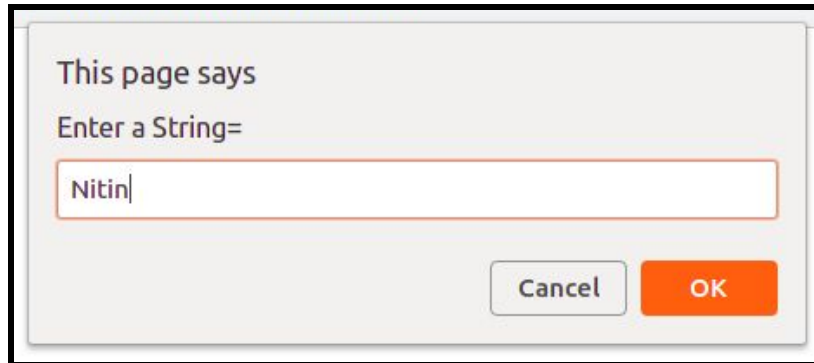
Palindrome.js

```javascript
var str=prompt("Enter a String= ");
var low = str.toLowerCase();
  var splitString = low.split("");
        var reverseArray = splitString.reverse();
        var joinArray = reverseArray.join("");

if(joinArray==low)
{
   alert("Palindrome")
}
else
```
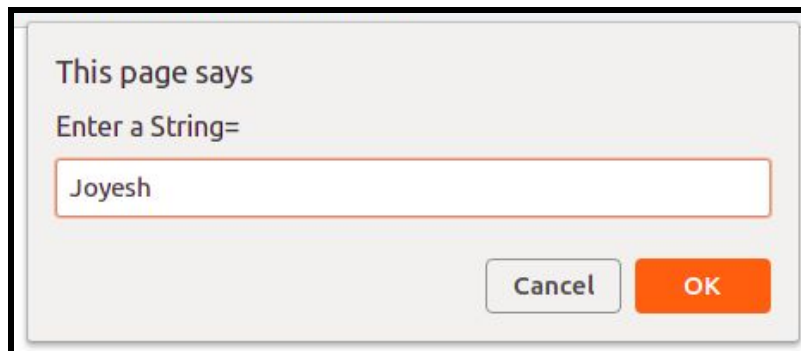
```
{
    alert("Not Palindrome")
}
```

Output:

This page says

Enter a String=

Nitin

Cancel   OK

This page says

Palindrome

OK

This page says

Enter a String=

Joyesh

Cancel   OK

This page says

Not Palindrome

OK

3. Area of circle

Area.html

```html
<!DOCTYPE html>
<html>
<head>
    <title>Area of Circle</title>
</head>
<body>
    <script type="text/javascript" src="area.js"></script>
</body>
</html>
```
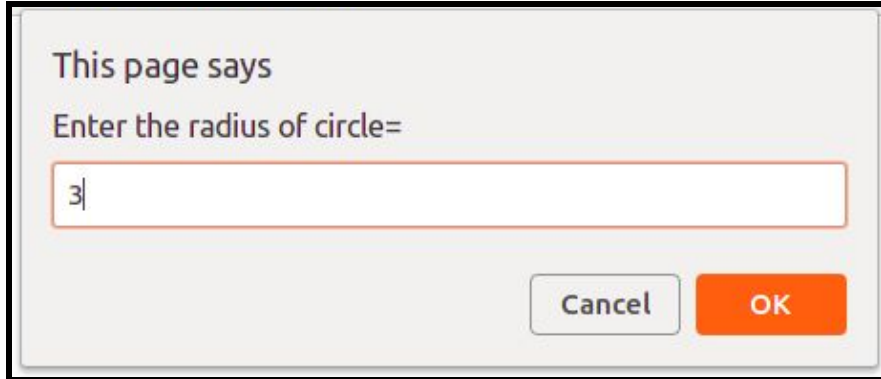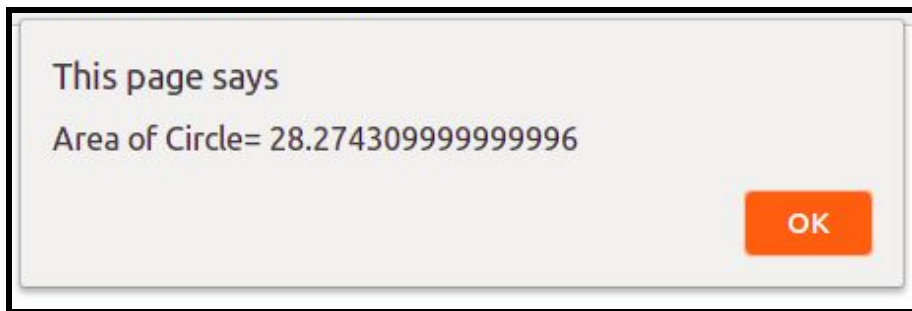
Area.js

```javascript
var radius=prompt("Enter the radius of circle= ");
var pie=3.14159;
var area=pie*radius*radius;
alert("Area of Circle= "+area);
```

Output:

This page says

Enter the radius of circle=

3

Cancel   OK

This page says

Area of Circle= 28.274309999999996

OK

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

Objectcopy.html

```
<!DOCTYPE html>
<html>
<head>
        <title>Object Copy</title>
</head>
<body>
    <script type="text/javascript" src="objectcopy.js"></script>
</body>
</html>
```

Objectcopy.js

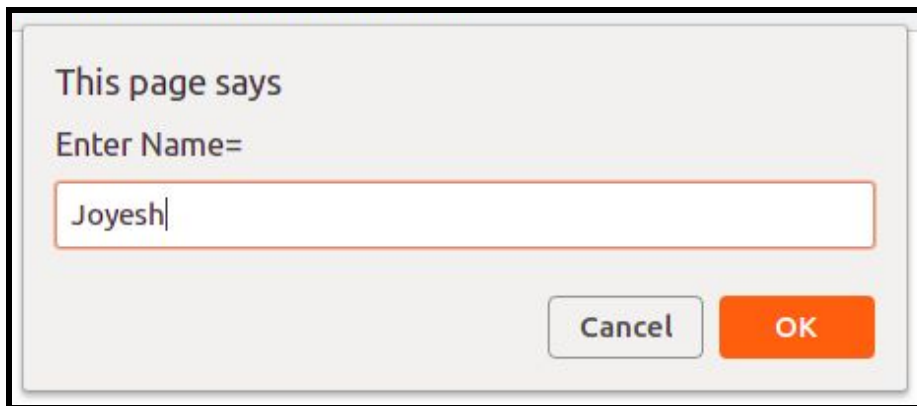var mydetails = {name:prompt("Enter Name= "), college:prompt("Enter College= "), age:prompt("Enter Age= "), location:prompt("Enter Location= ")};

console.log("My Original Object= ",mydetails)

var copyobject = Object.assign({},mydetails);

console.log("My New Object= ",copyobject);

Output:

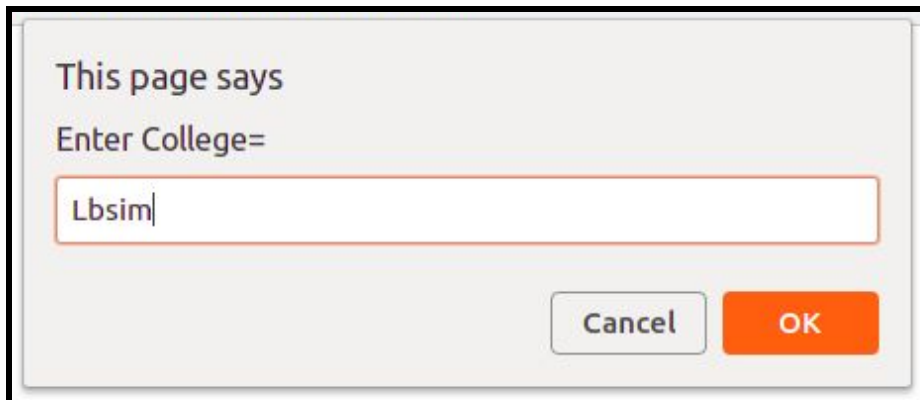This page says

Enter Name=

Joyesh

Cancel   OK

This page says

Enter College=

Lbsim

Cancel   OK

Elements	Console	Sources	Network	Performance	Memory	Application	Security	Audits

top ▼ ● Filter   Default levels ▼

✕ Expression
  not available

My Original Object= ▶ {name: "Joyesh", college: "Lbsim", age: "23", location: "New Delhi"}
My New Object= ▶ {name: "Joyesh", college: "Lbsim", age: "23", location: "New Delhi"}
>
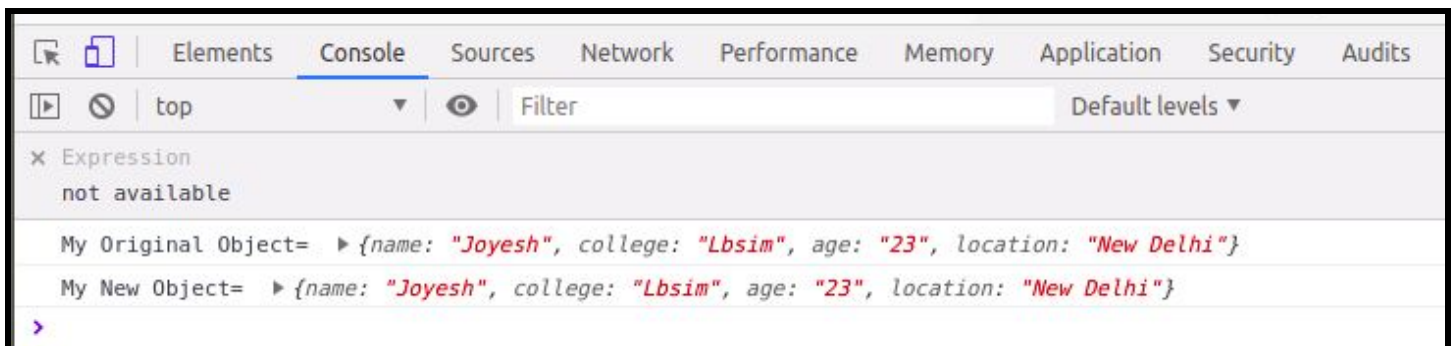
5. create a list of objects of Employee with info as follow :

- a. **Name, age, salary ,DOB**
- b. **filter all employees with salary greater than 5000**
- c. **group employee on the basis of their age**
- d. **fetch employees with salary less than 1000 and age greater than 20. Then give them an increment 5 times their salary.**

Objectgroup.html

```html
<!DOCTYPE html>
<html>
<head>
        <title>Object Group</title>
</head>
<body>
   <script type="text/javascript" src="objectgroup.js"></script>
</body>
</html>
```

Objectgroup.js

```javascript
var employee = [
        { Name: 'Joyesh', Age: 23, Salary: 6000, DOB: '23/04/1995' },
        { Name: 'Kamal', Age: 22, Salary: 7000, DOB: '27/11/1996' },
        { Name: 'Rohit', Age: 19, Salary: 800, DOB: '27/11/1993' },
        { Name: 'Mohit', Age: 20, Salary: 950, DOB: '27/11/1993' },
        { Name: 'Sonu', Age: 18, Salary: 1000, DOB: '27/11/1993' },
];

console.log("a. List of all employees= ",employee);

console.log("b.");
console.log("Employees whose salary > 5000 = ")
for(var i=0;i < employee.length;i++)
```

```javascript
{
    if(employee[i].Salary > 5000)
    console.log(employee[i]);
}


console.log("d.");
for(var i=0;i < employee.length;i++)
{
    if(employee[i].Salary > 1000 && employee[i].Age > 20)
    {
        var inc = employee[i].Salary * 5;
        console.log("Salary of ",employee[i].Name," after increment= ",inc);
    }
}
```
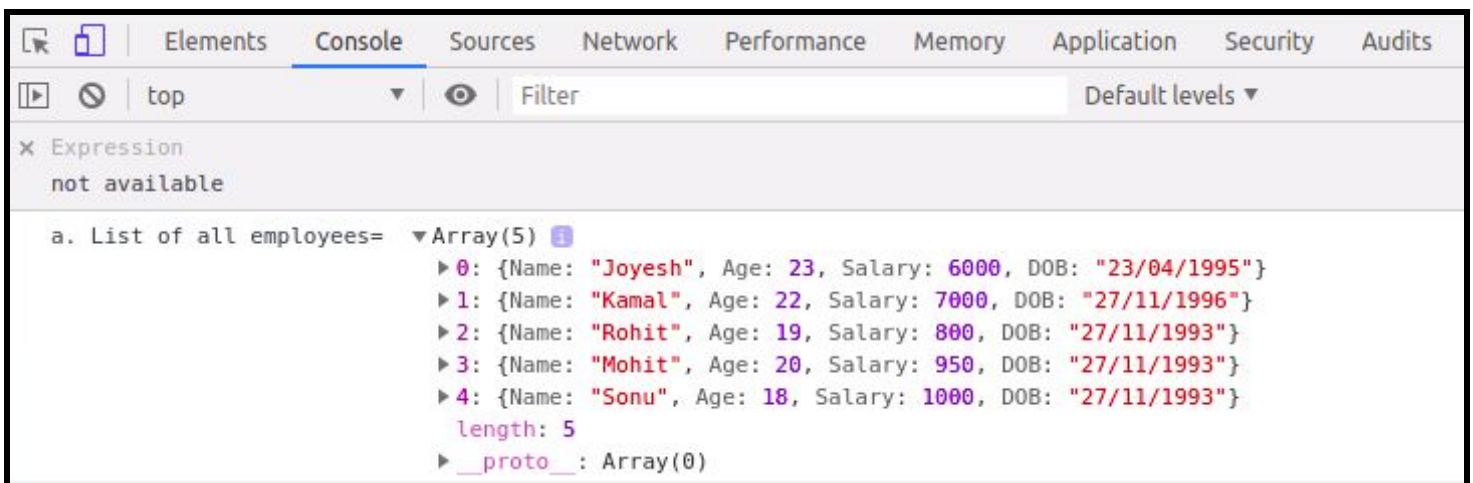
Output:

Browser developer console showing:

```
x Expression
  not available

a. List of all employees=   ▼Array(5) ℹ
                            ▶0: {Name: "Joyesh", Age: 23, Salary: 6000, DOB: "23/04/1995"}
                            ▶1: {Name: "Kamal", Age: 22, Salary: 7000, DOB: "27/11/1996"}
                            ▶2: {Name: "Rohit", Age: 19, Salary: 800, DOB: "27/11/1993"}
                            ▶3: {Name: "Mohit", Age: 20, Salary: 950, DOB: "27/11/1993"}
                            ▶4: {Name: "Sonu", Age: 18, Salary: 1000, DOB: "27/11/1993"}
                             length: 5
                            ▶__proto__: Array(0)
```

```
b.
Employees whose salary > 5000 =
  ▶ {Name: "Joyesh", Age: 23, Salary: 6000, DOB: "23/04/1995"}
  ▶ {Name: "Kamal", Age: 22, Salary: 7000, DOB: "27/11/1996"}
```

```
d.
Salary of  Joyesh  after increment=  30000
Salary of  Kamal   after increment=  35000
›
```