

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=

This page says

Enter The Rate of Interest=

This page says

Enter The Number of Years=

This page says

Simple Interest = 4000

2. is palindrome string

Palindrome.html

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

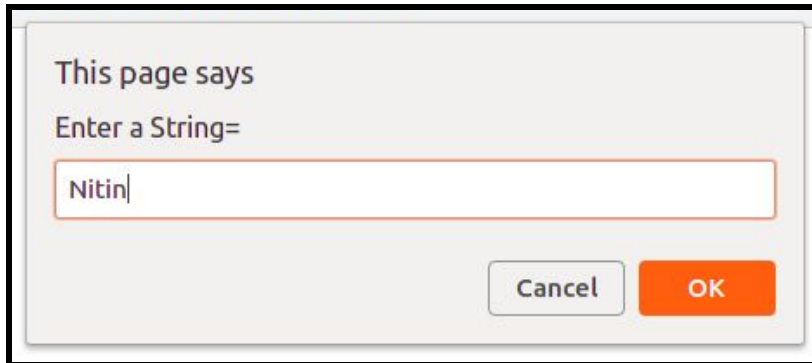
Palindrome.js

```
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")  
}
```

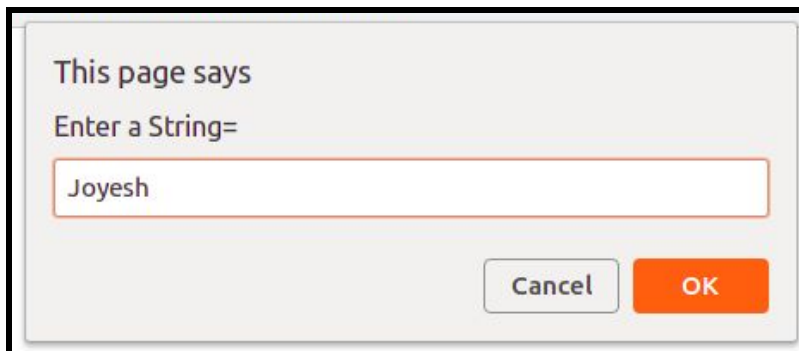
Output:



This dialog box has a title bar. The main content area contains the text "This page says" followed by "Enter a String=" and a text input field containing "Nitin|". At the bottom right, there are two buttons: "Cancel" and "OK".



This dialog box has a title bar. The main content area contains the text "This page says" followed by "Palindrome". At the bottom right, there is a single "OK" button.



This dialog box has a title bar. The main content area contains the text "This page says" followed by "Enter a String=" and a text input field containing "Joyesh". At the bottom right, there are two buttons: "Cancel" and "OK".



3. Area of circle

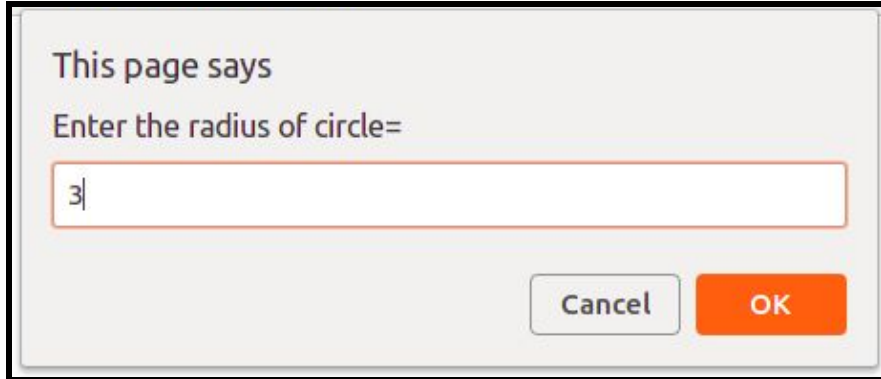
Area.html

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

Area.js

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

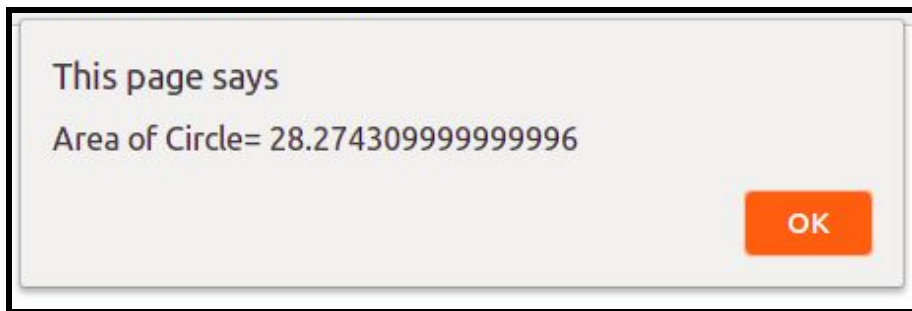
Output:



This page says

Enter the radius of circle=

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

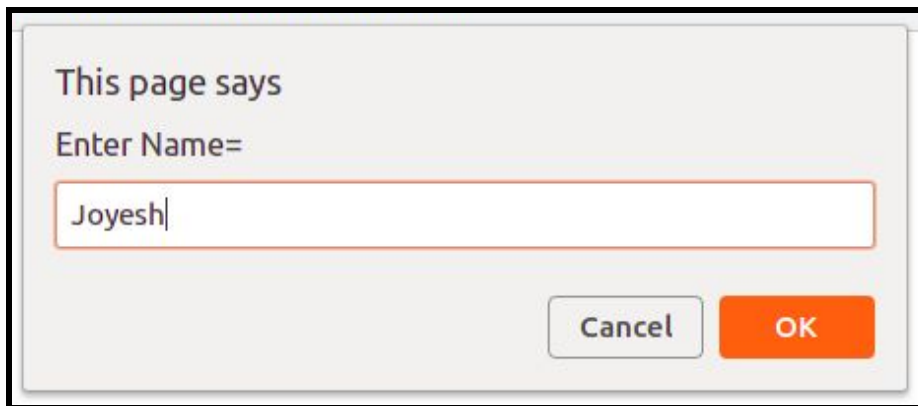
```
var mydetails = {name:prompt("Enter Name= "), college:prompt("Enter College= "), age:prompt("Enter Age= "), location:prompt("Enter Location=")});
```

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

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

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

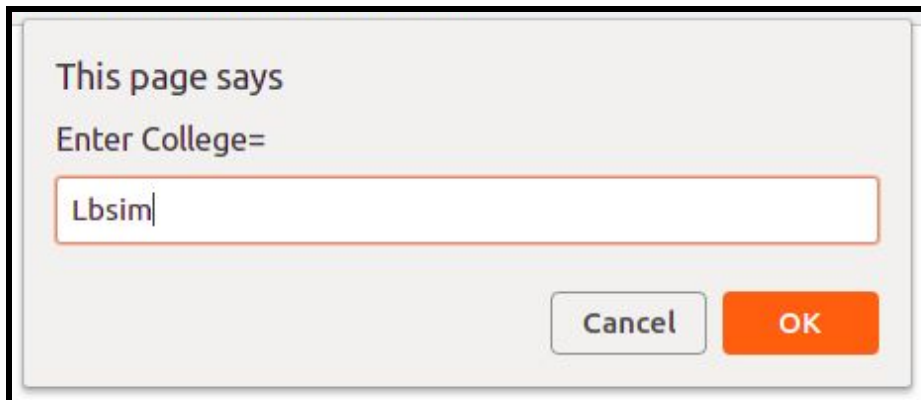
Output:



This page says

Enter Name=

Cancel OK



This page says

Enter College=

Cancel OK

This page says

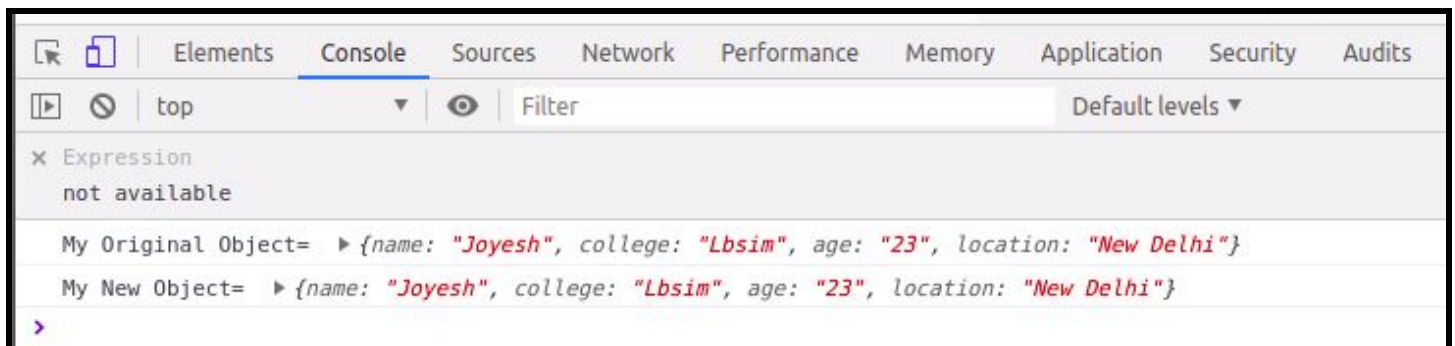
Enter Age=

Cancel OK

This page says

Enter Location=

Cancel OK



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

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

Objectgroup.html

```
<!DOCTYPE html>

<html>

<head>

    <title>Object Group</title>

</head>

<body>

    <script type="text/javascript" src="objectgroup.js"></script>

</body>

</html>
```

Objectgroup.js

```
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++)
```

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

```
console.log("c.");  
for(var i=0;i < employee.length;i++)  
{  
    if(employee[i].Age < 20)  
        console.log("Employees whose age is less than 20 = ",employee[i]);  
    else if(employee[i].Age >= 20 && employee[i].Age < 25)  
        console.log("Employees whose age is greater than or equal to 20  
and less than 25 = ",employee[i]);  
    else  
        console.log("Employees whose age is greater than 25 =  
",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:

```
Elements Console Sources Network Performance Memory Application Security Audits  
top Filter Default levels  
x Expression  
not available  
a. List of all employees= Array(5)  
  ▶ 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"}  
.
```

```
c.  
Employees whose age is greater then or equal to 20 and less then 25 = Object
```

```
Age: 23  
DOB: "23/04/1995"  
Name: "Joyesh"  
Salary: 6000  
▶ __proto__: Object  
Employees whose age is greater then or equal to 20 and less then 25 = Object  
Age: 22  
DOB: "27/11/1996"  
Name: "Kamal"  
Salary: 7000  
▶ __proto__: Object
```

```
Employees whose age is less than 20 = ▼Object ⓘ  
  Age: 19  
  DOB: "27/11/1993"  
  Name: "Rohit"  
  Salary: 800  
  ▶ __proto__: Object
```

```
Employees whose age is greater than or equal to 20 and less than 25 = ▼Object ⓘ  
  Age: 20  
  DOB: "27/11/1993"  
  Name: "Mohit"  
  Salary: 950  
  ▶ __proto__: Object
```

```
Employees whose age is less than 20 = ▼Object ⓘ  
  Age: 18  
  DOB: "27/11/1993"  
  Name: "Sonu"  
  Salary: 1000  
  ▶ __proto__: Object
```

d.

Salary of Joyesh after increment= 30000

Salary of Kamal after increment= 35000

>