JAVASCRIPT ASSIGNMENT

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

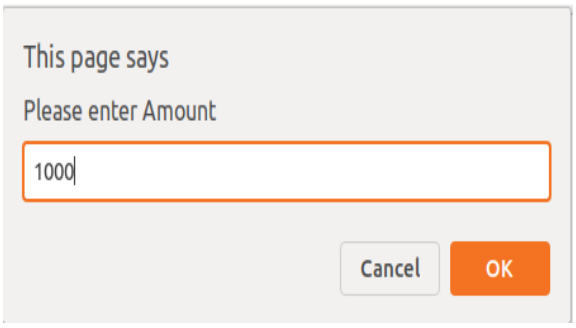
CODE:-

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
<script>
function simpleinterest(){
    var a= prompt('Please enter Amount');
    var r = prompt('Please enter Rate');
    var t = prompt('Please enter No. of years');
    var p   = (a/(1 + r*t))

    var si = (p*r*t)/100;
    document.getElementById('si').innerHTML="Simple Interest (calculated anually) is: "+si;
}
</script>
</head>
<body>

    <button onclick="simpleinterest()">Simple Interest</button>
    <p id="si"></p>
</body>
</html>
```

HTML

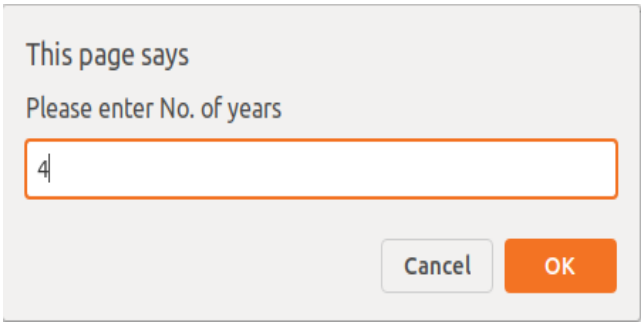
OUTPUTS:-

OUTPUT 1.)

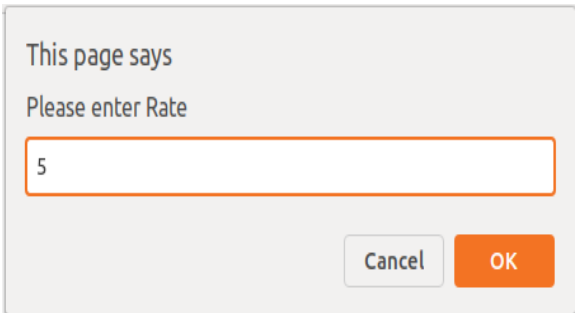


-->

OUTPUT 2.)

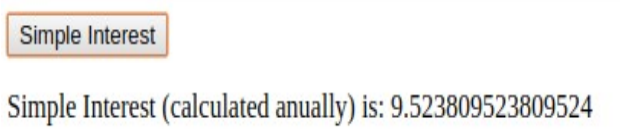


OUTPUT 3.)



-->

OUTPUT 4.)



2. is palindrome string .

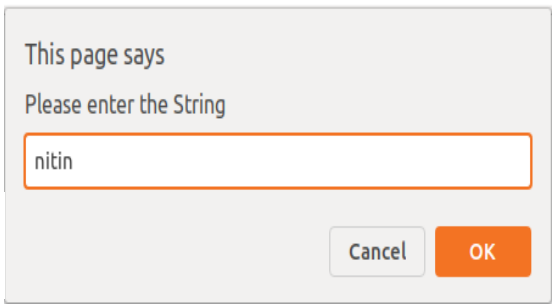
CODE:-

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
<script>
function palindrome(str){
    var str = prompt('Please enter the String');
var len = str.length;
var mid = Math.floor(len/2);

for ( var i = 0; i < mid; i++ ) {
    if (str[i] !== str[len - 1 - i]) {
        document.write("FALSE");
        return false;
    }
}
document.write("TRUE");
return true;
}
</script>
</head>
<body>

    <button onclick="palindrome()">Click to Check Palindrome</button>

</body>
</html>
```

OUTPUTS:-

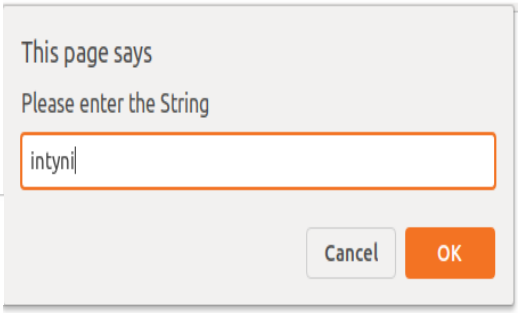
OUTPUT 1.)

OUTPUT 2.)



TRUE

OUTPUT 3.)



FALSE

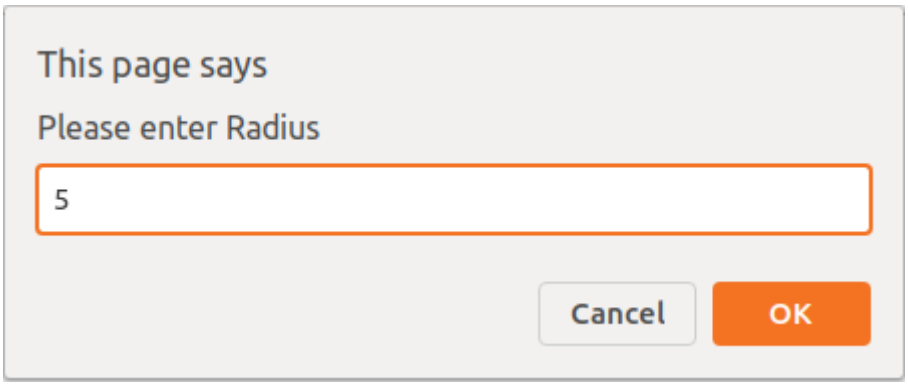
3.Area of circle.

CODE:-

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
<script>
function area(){
    var radius = prompt('Please enter Radius');
    var areaCircle = Math.PI * radius * radius;
            document.write("AREA OF CIRCLE IS"+ areaCircle);
}
</script>
</head>
<body>

    <button onclick="area()">Calculate area of the cricle</button>

</body>
</html>
```

OUTPUTS:- OUTPUT 1.)

OUTPUT 2.)



OUTPUT 3.)

AREA OF CIRCLE IS78.53981633974483

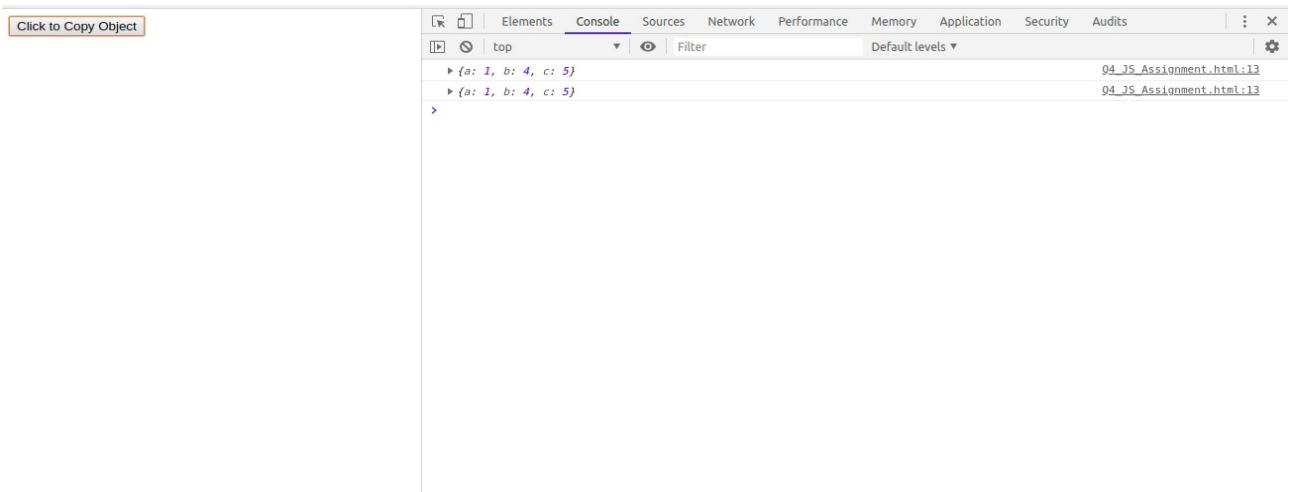
4.Copy information of one object to another and log it to console.

CODE:-

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
<script>
function CopyObject(){
    const obj1 = { a: 1, b: 2 };
    const obj2 = { b: 4, c: 5 };
    const output = Object.assign(obj1, obj2);

    console.log(output);

}
</script>
</head>
<body>

    <button onclick="CopyObject()">Click to Copy Object</button>

</body>
</html>
```

OUTPUTS:- OUTPUT 1.)

OUTPUT 2.)



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

CODE:-

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
<script>
function Employee(){
    var list = [
    {name:'Siddhant',age:21,salary:999,DOB:25-08-1998},
    {name:'Apoorva',age:14,salary:5000,DOB:25-08-1998},
    {name:'Bhupesh',age:31,salary:5000,DOB:25-08-1998},
    {name:'Jay',age:22,salary:200,DOB:25-08-1998},
    {name:'Varun',age:12,salary:300,DOB:25-08-1998},
    {name:'Avi',age:21,salary:800,DOB:25-08-1998},
    {name:'Aditiya',age:21,salary:8000,DOB:25-08-1998},
    {name:'Aariv',age:25,salary:8000,DOB:25-08-1998},
    {name:'Devansh',age:16,salary:800,DOB:25-08-1998},
    {name:'Nitin',age:25,salary:800,DOB:25-08-1998},
    {name:'Saket',age:14,salary:2000,DOB:25-08-1998}
    ];
    function filter(){
    var filteredList = list.filter(res=>{
     if(res.salary>5000)
     return true;
    })
    console.log(filteredList)
    }
    function fetch(){
    var fetchedList = list.filter(res=>{
        if(res.salary<5000 && res.age>20){
        res.salary=res.salary*5;
        return true;
    }
    else
        return false;


    })

    console.log(fetchedList)
}
    function group(){
        var groupList = list.reduce((r,a) => {
            r[a.age] = [...r[a.age] || [], a];

            return r;

        },{});
        console.log(groupList);
    }
  group();
  filter();
  fetch();
}
</script>
</head>
<body>

    <button onclick="Employee()">Click to Fetch Data</button>

</body>
</html>
```

- Name, age, salary ,DOB.

  OUTPUT 1.):-

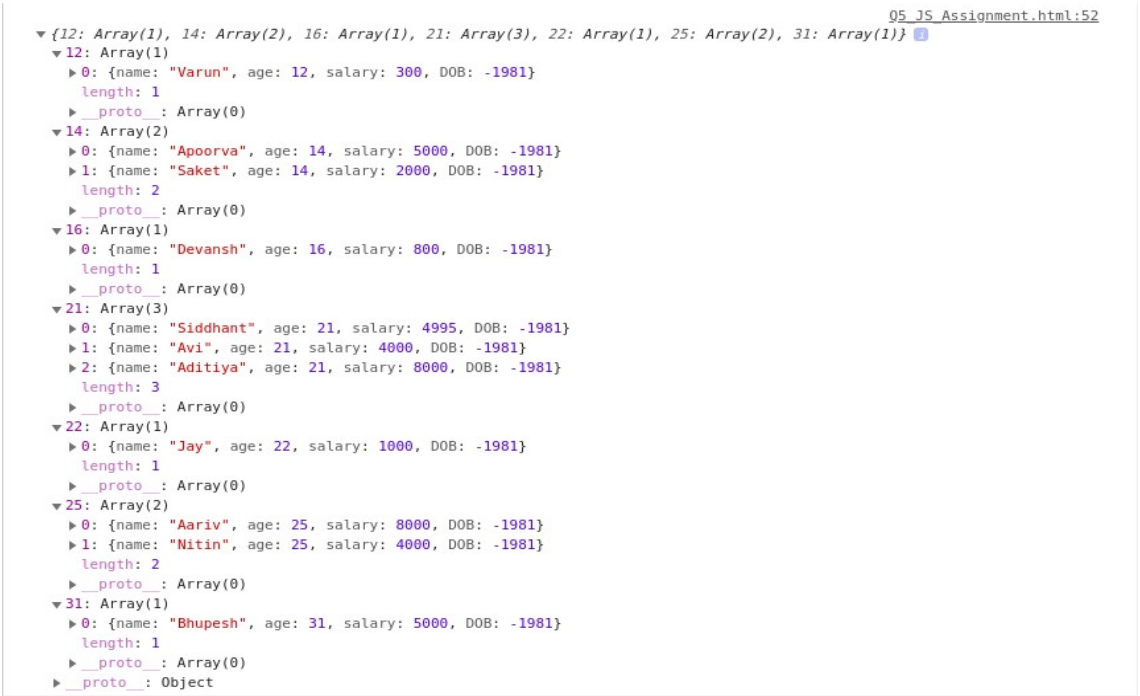
```
var list = [
{name:'Siddhant',age:21,salary:999,DOB:25-08-1998},
{name:'Apoorva',age:14,salary:5000,DOB:25-08-1998},
{name:'Bhupesh',age:31,salary:5000,DOB:25-08-1998},
{name:'Jay',age:22,salary:200,DOB:25-08-1998},
{name:'Varun',age:12,salary:300,DOB:25-08-1998},
{name:'Avi',age:21,salary:800,DOB:25-08-1998},
{name:'Aditiya',age:21,salary:8000,DOB:25-08-1998},
{name:'Aariv',age:25,salary:8000,DOB:25-08-1998},
{name:'Devansh',age:16,salary:800,DOB:25-08-1998},
{name:'Nitin',age:25,salary:800,DOB:25-08-1998},
{name:'Saket',age:14,salary:2000,DOB:25-08-1998}
];
```

- filter all employees with salary greater than 5000.

  OUTPUT 2.):-

- group employee on the basis of their age.

  OUTPUT 3.):-



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

  OUTPUT 4.):-

```
(4) [{…}, {…}, {…}, {…}]                                    Q5_JS_Assignment.html:43
  0: {name: "Siddhant", age: 21, salary: 4995, DOB: -1981}
  1: {name: "Jay", age: 22, salary: 1000, DOB: -1981}
  2: {name: "Avi", age: 21, salary: 4000, DOB: -1981}
  3: {name: "Nitin", age: 25, salary: 4000, DOB: -1981}
  length: 4
  __proto__: Array(0)
```

CONSOLE:-