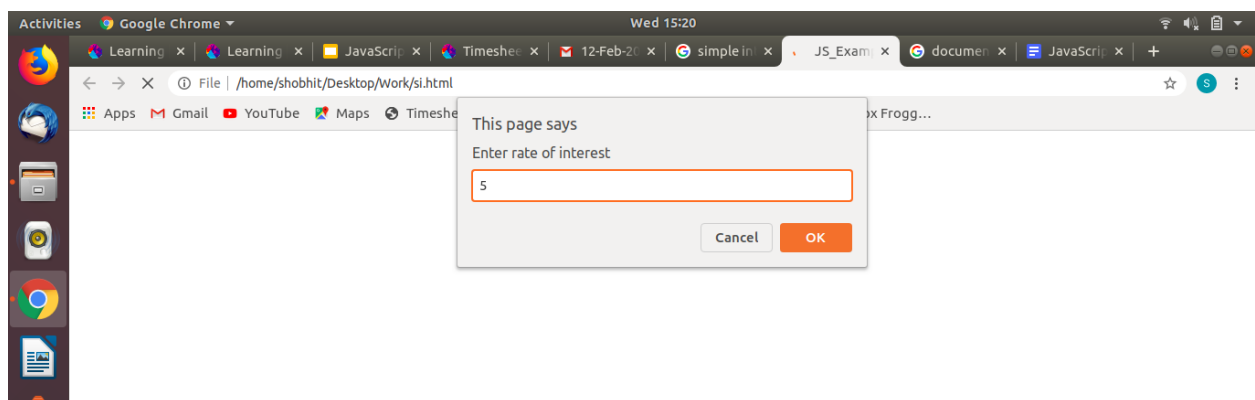
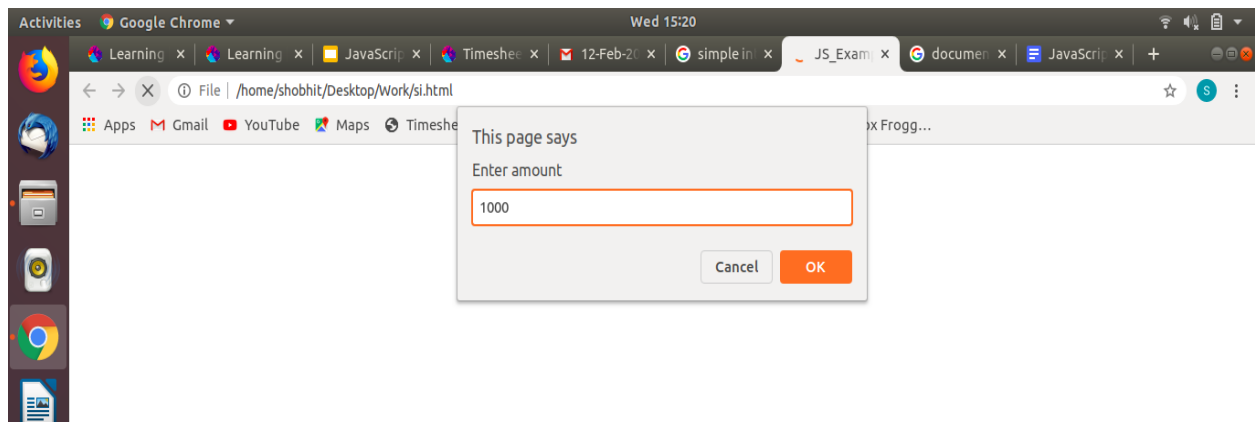
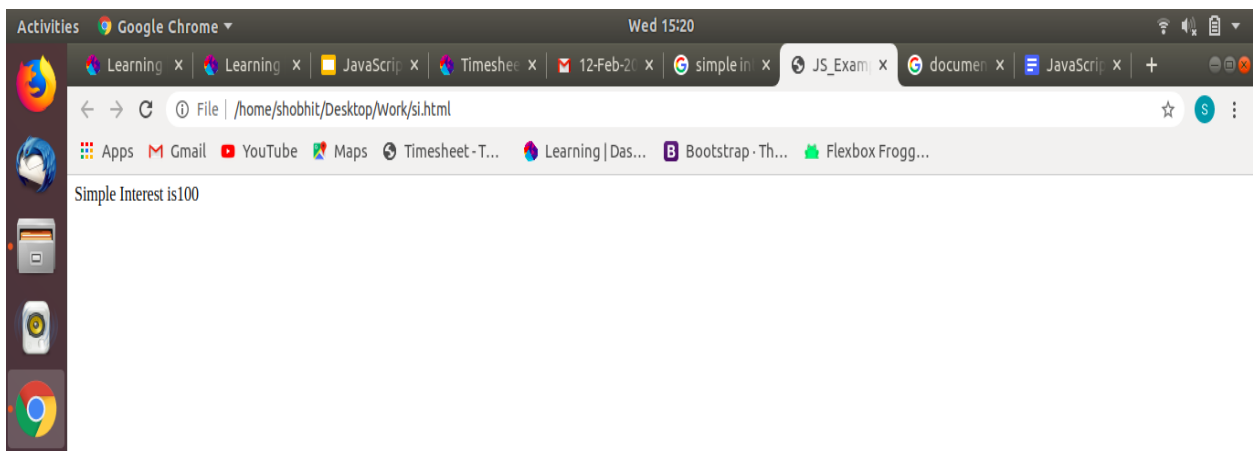
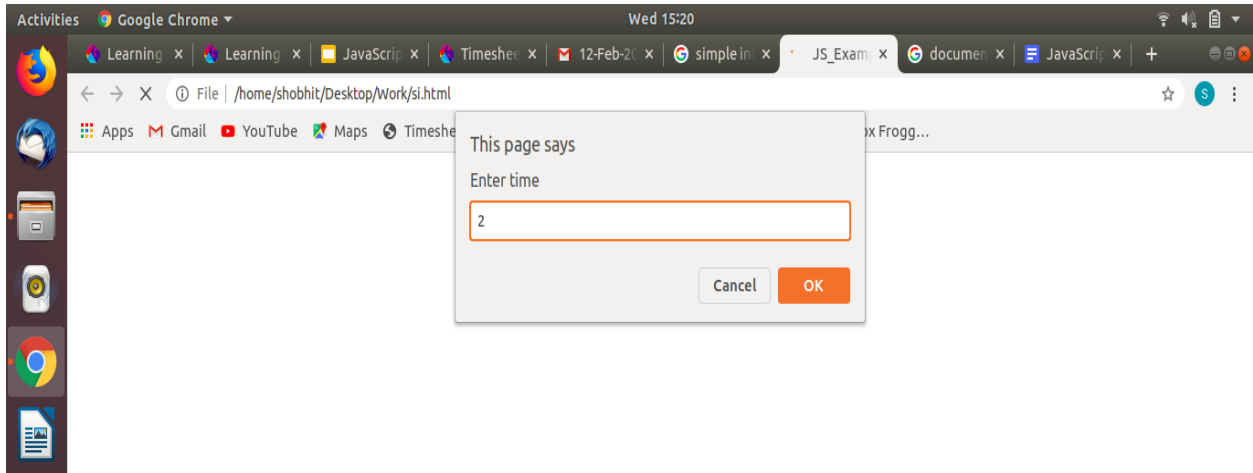


1.

```
<!DOCTYPE html>
<html>
  <head>
    <title>JS_Example</title>
    <script>
      let a=prompt("Enter amount");
      let r=prompt("Enter rate of interest");
      let t=prompt("Enter time");
      let si=(a*r*t)/100;
      document.write("Simple Interest is"+si);
    </script>
  </head>
  <body>
    <span id="res"></span>
  </body>
</html>
```





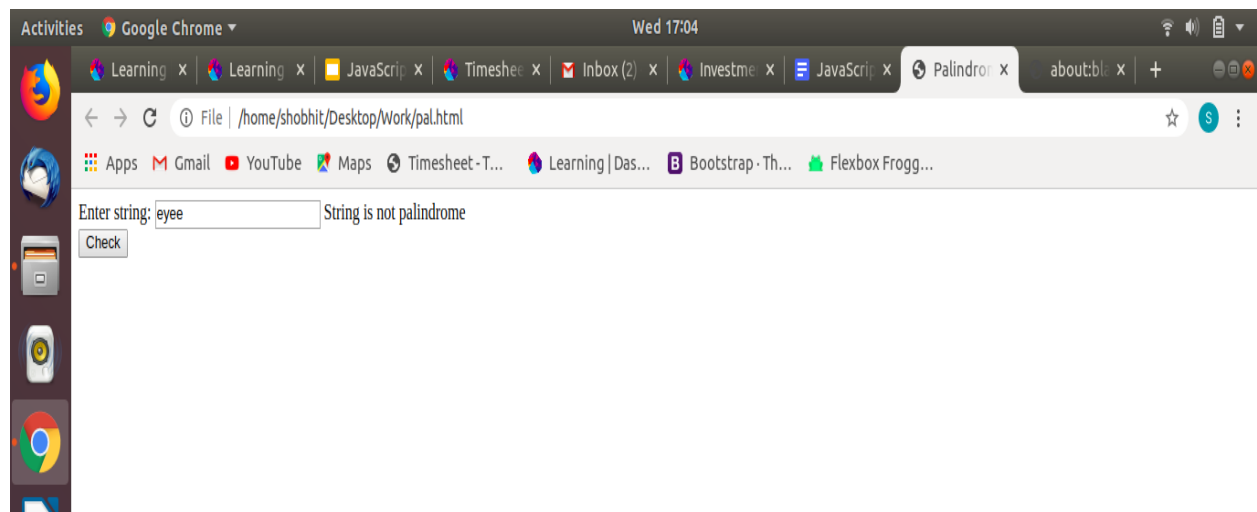
2.

```
<!Doctype html>
<html>
  <head>
    <title>Palindrome string</title>
    <script>
      function isPalindrome()
      {
        var str=document.getElementById('inp').value;
        var lowStr = str.toLowerCase();
        var reverseStr = lowStr.split('').reverse().join('');
        if (reverseStr === lowStr)
        {
          document.getElementById("span").innerText="String is
palindrome";
        }
      }
    </script>
  </head>
  <body>
    <input type="text" id="inp" value="1234567890" />
    <span id="span"></span>
  </body>
</html>
```

```

        else
        {
            document.getElementById("span").innerText="String is
not palindrome";
        }
    }
</script>
</head>
<body>
    Enter string: <input id="inp" type="text"></input>
    <span id="span"></span><br/>
    <button onclick="isPalindrome()">Check</input><br/>
</body>
</html>

```



3.

```

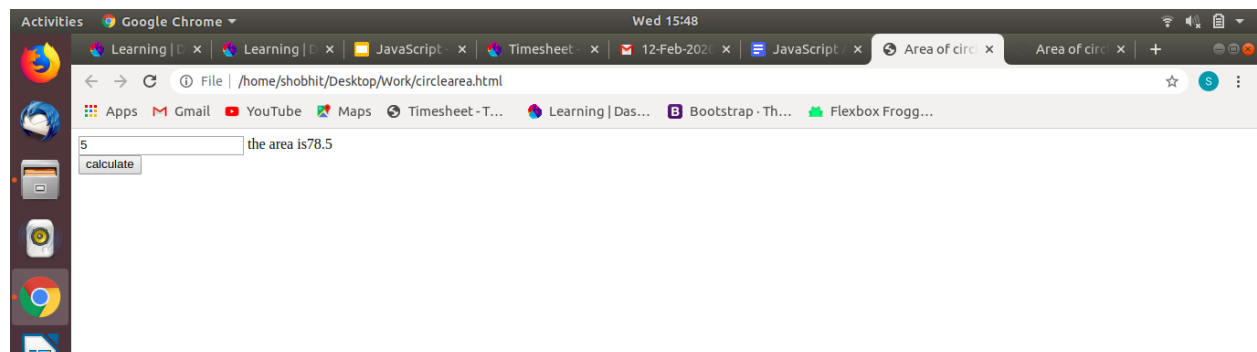
<!Doctype html>
<html>
<head>
<title>Area of circle</title>
<script>
    function calc(){
        var rad=document.getElementById('input').value;
        var area =3.14*(rad*rad);
    }

```

```

    document.getElementById('span').innerText="the area is"+area;
  }
</script>
</head>
<body>
  <input id="input" type="number"></input>
  <span id="span"> </span><br/>
  <button onclick="calc()">calculate</button>
</body>
</html>

```

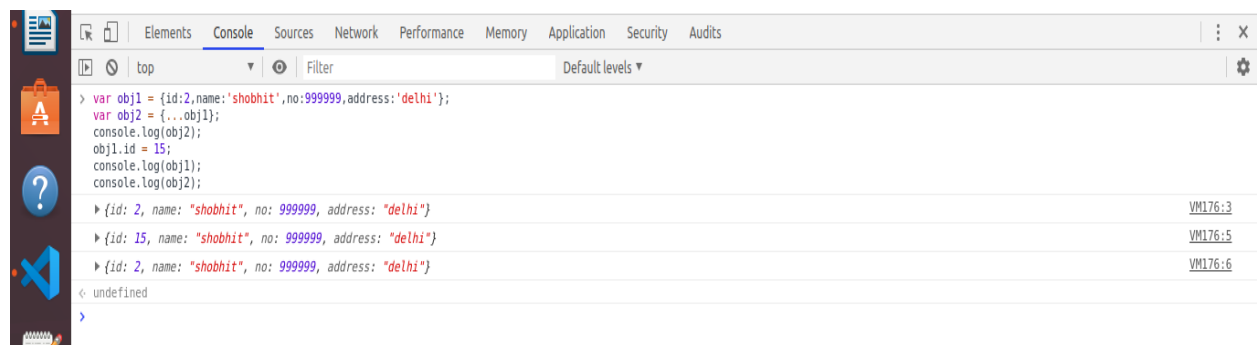


4.

```

var obj1 = {id:2,name:'shobhit',no:999999,address:'delhi'};
var obj2 = {...obj1};
console.log(obj2);
obj1.id = 15;
console.log(obj1);
console.log(obj2);

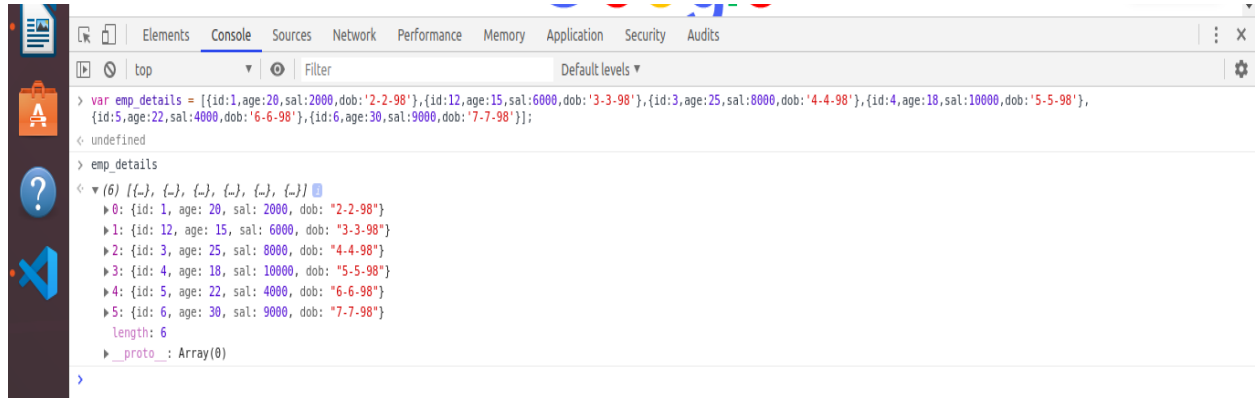
```



5.

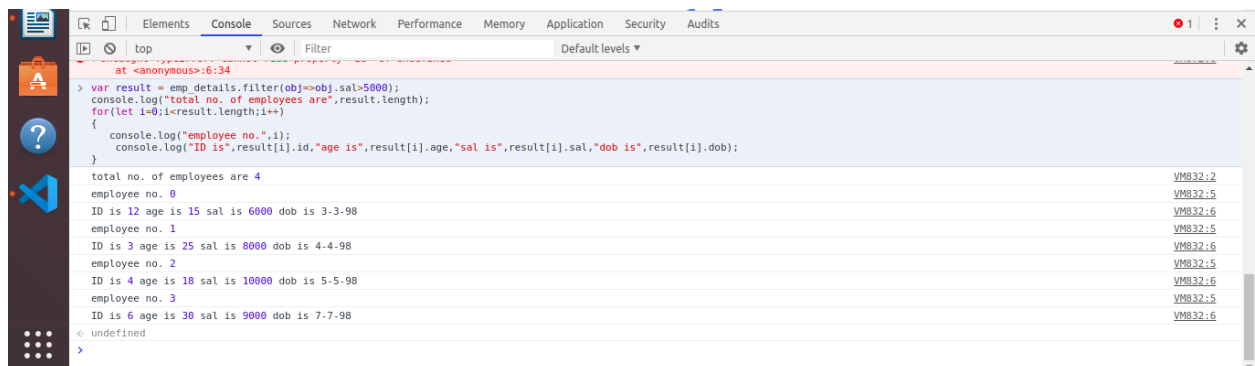
a.

```
var emp_details = [{id:1,age:20,sal:2000,dob:'2-2-98'}, {id:12,age:15,sal:6000,dob:'3-3-98'},  
{id:3,age:25,sal:8000,dob:'4-4-98'}, {id:4,age:18,sal:10000,dob:'5-5-98'},  
{id:5,age:22,sal:4000,dob:'6-6-98'}, {id:6,age:30,sal:9000,dob:'7-7-98'}];
```



b.

```
var result = emp_details.filter(obj=>obj.sal>5000);  
console.log("total no. of employees are",result.length);  
for(let i=0;i<result.length;i++)  
{  
  console.log("employee no.",i);  
  console.log("ID is",result[i].id,"age is",result[i].age,"sal is",result[i].sal,"dob is",result[i].dob);  
}
```



c.

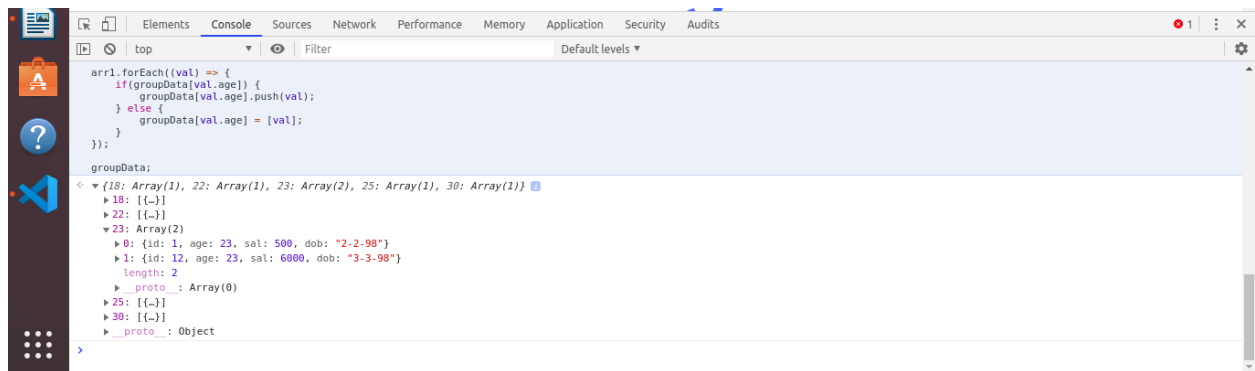
```
const groupData = {};
```

```

arr1.forEach((val) => {
  if(groupData[val.age]) {
    groupData[val.age].push(val);
  } else {
    groupData[val.age] = [val];
  }
});

```

groupData;



d.

```

var result = arr1.filter(function(obj){
  if(obj.sal<1000 && obj.age>20)
  { console.log(obj);
  return obj; }
});

```

var final = result.map(obj=> ({...obj, sal: obj.sal\*5}));

final;

