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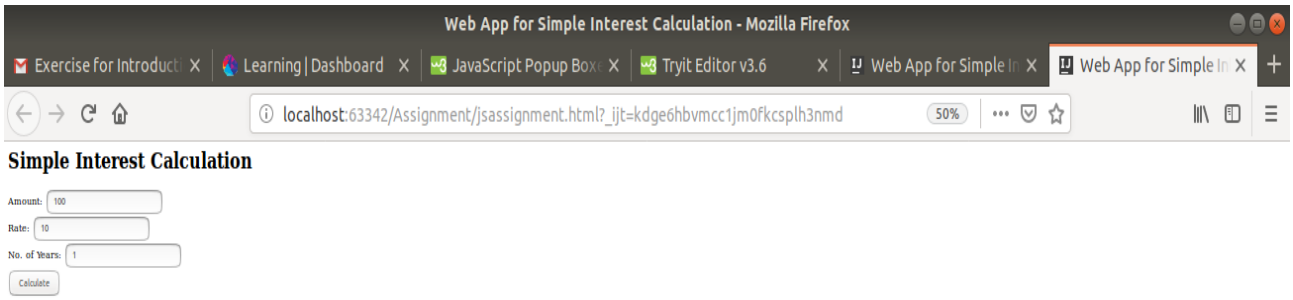
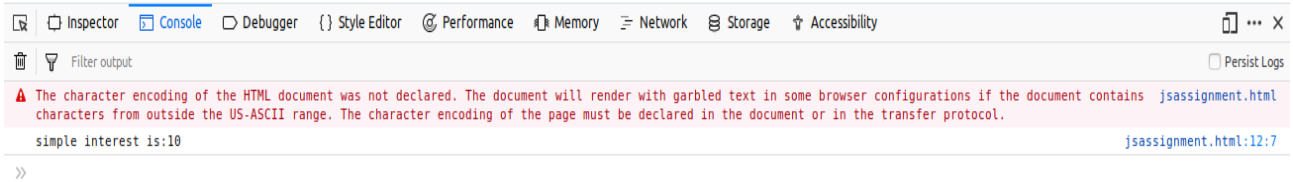
1.Prompt for amount, interest rate and no. of years and calculate simple interest.

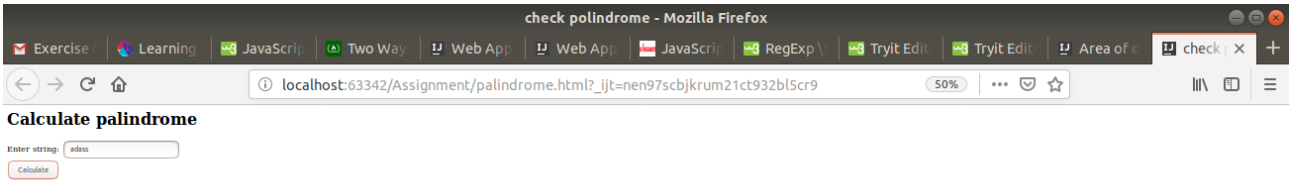
```
<html>
<head>
  <title>calculate Simple Interest</title>
  <script>
       function calculate()
       {
         p = document.getElementById("p").value;
       n = document.getElementById("n").value;
       r = document.getElementById("r").value;
       txt="simple interest is:"+p*n*r/100;
       console.log(txt);
    }
  </script>
</head>
<body>
<h1>Simple Interest Calculation</h1>
Amount: <input id="p"><br/>
Rate: <input id="r"><br/>
No. of Years: <input id="n"><br/>
<button onclick="calculate()">Calculate</button>
<p id="result"></p>
</body>
</html>
```

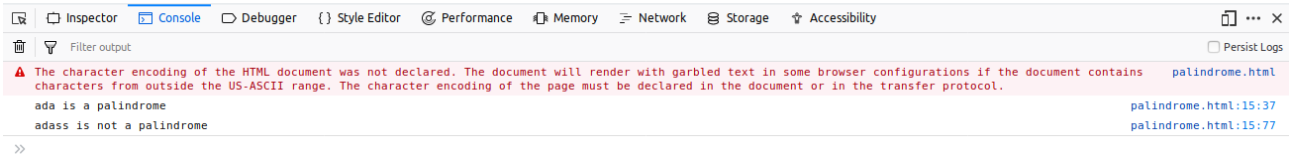




2.is palindrome string

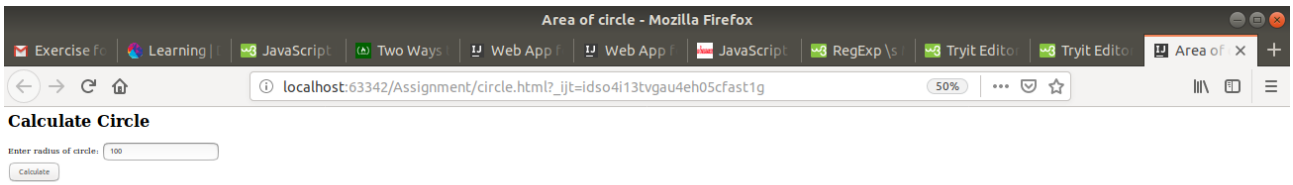
```
<html>
<head>
  <title>check palindrome</title>
  <script>
       function calculate() {
         str= document.getElementById("s").value;
         let str1 = str.replace(/\s/g, '');
         // reverses string
         let str2 = str1.split('').reverse().join('');
         // compares original and reversed string
         let result = str1 == str2 ? console.log(str + ' is a palindrome') :
console.log(str + ' is not a palindrome')
       }
  </script>
</head>
<body>
<h1>Calculate palindrome</h1>
Enter string: <input id="s"><br/>
<button onclick="calculate()">Calculate</button>
<p id="result"></p>
</body>
</html>
```

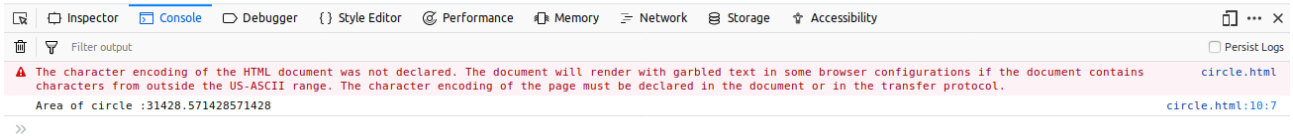




3. Area of circle

```
<html>
<head>
  <title>Area of circle</title>
  <script>
    function calculate() {
      radius = document.getElementById("c").value;
      area=22/7*radius*radius;
      console.log('Area of circle :'+area)
    }
  </script>
</head>
<body>
<h1>Calculate Circle</h1>
Enter radius of circle: <input id="c"><br/>
<button onclick="calculate()">Calculate</button>
</body>
</html>
```

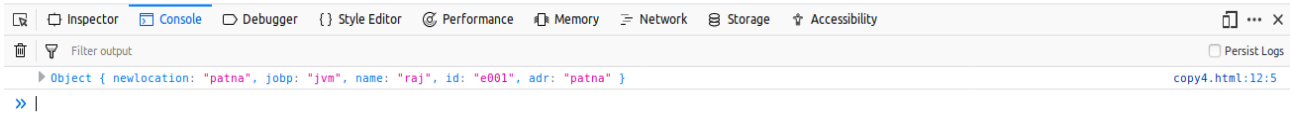




4.Copy information of one object to another and log it to console.

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <meta name="employee details" content="width=device-width">
  <title>JS Bin</title>
<script>
  function copy( obj1, obj2 ) {
    for ( var i in obj2 ) {
      obj1[i] = obj2[i];
    }
    console.log(obj1);
```

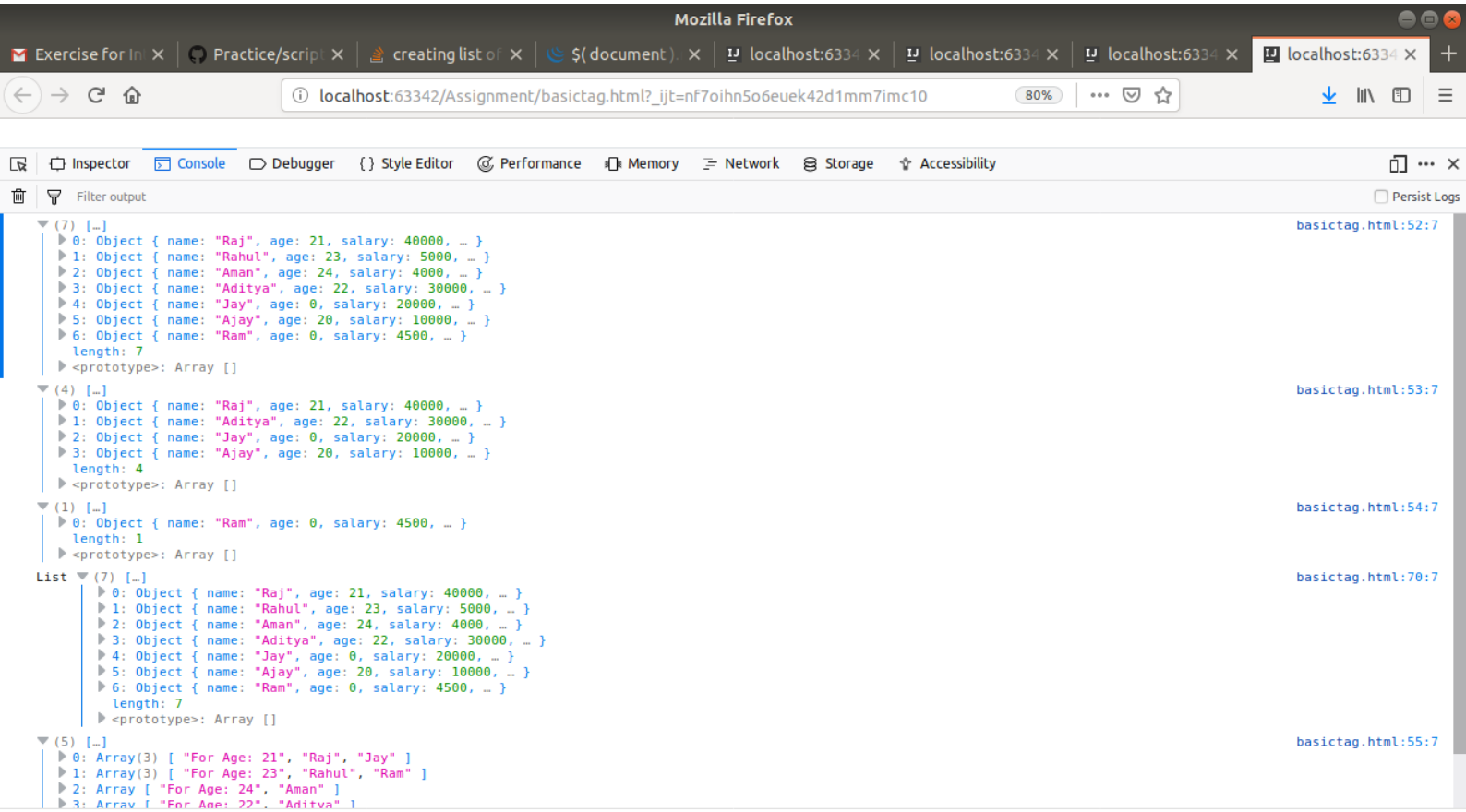
```
  }
  var emp1= {
    name: "raj",
    id: "e001",
    adr: "patna"
  };
  var emp = copy({
    newlocation: "patna",
    jobp: "jvm"
  }, emp1 );
</script>
</head>
<body>
</body>
</html>
```



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.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <script>
    createList();
    function createList(){
      var li = [
        {
          name:"Raj",
          age: 21,
          salary : 40000,
          dob: "01/01/1994"
        },
        {
          name: "Rahul",
          age:23,
          salary: 5000,
          dob: "02/02/1995"
        },
        {
          name: "Aman",
          age: 24,
          salary: 4000,
          dob:"03/03/1994"
        },
        {
          name:"Aditya",
          age: 22,
          salary: 30000,
          dob:"04/04/1996"
        },
        {
          name:"Jay",
          age: 21,
          salary: 20000,
          dob:"05/05/1997"
        },
        {
          name:"Ajay",
          age: 20,
          salary: 10000,
          dob:"06/06/1998"
        },
        {
          name:"Ram",
          age: 23,
          salary: 900,
          dob:"06/06/1995"
        }
      ];
```

```
      console.log(li);
      console.log(filterSalary(li));
      console.log(filterSalaryAndAge(li));
      console.log(groupByAge(li));
    }
    function filterSalary(list){
      var arr=[];
      for(var i = 0 ; i < list.length ; i++){
        if(list[i]["salary"]>5000){
          arr.push(list[i]);
        }
      }
      return arr;
    }
    function groupByAge(list){
      console.log("List",list);
      var arr = [];
      var arr1 = list;
      for(var i = 0 ; i < arr1.length ; i++){
        if(arr1[i]["age"]!==0){
          var arr2=[];
          arr2.push("For Age: "+ arr1[i]["age"]);
          arr2.push(arr1[i]["name"]);
          for(var j = i+1 ; j < arr1.length;j++){
            if(arr1[i]["age"]===arr1[j]["age"]){
              arr2.push(list[j]["name"]);
              arr1[j]["age"] = 0;
            }
          }
          arr.push(arr2);
        }
      }
      return arr;
    }
    function filterSalaryAndAge(list){
      var arr=[];
      for(var i = 0 ; i < list.length ; i++){
        if(list[i]["salary"]<1000 && list[i]["age"]>20){
          list[i]["salary"] = list[i]["salary"] * 5;
          arr.push(list[i]);
        }
      }
      return arr;
    }
  </script>
</head>
<body>
</body>
</html>
```


Mozilla Firefox
Exercise for In
Practice/scrip
creating list of
$(document).
localhost:6334
localhost:6334
localhost:6334
localhost:6334
localhost:63342/Assignment/basictag.html?_ijt=nf7oihn5o6euek42d1mm7imc10
80%
Inspector
Console
Debugger
Style Editor
Performance
Memory
Network
Storage
Accessibility
Filter output
Persist Logs
(7) […]
basictag.html:52:7
0: Object { name: "Raj", age: 21, salary: 40000, … }
1: Object { name: "Rahul", age: 23, salary: 5000, … }
2: Object { name: "Aman", age: 24, salary: 4000, … }
3: Object { name: "Aditya", age: 22, salary: 30000, … }
4: Object { name: "Jay", age: 0, salary: 20000, … }
5: Object { name: "Ajay", age: 20, salary: 10000, … }
6: Object { name: "Ram", age: 0, salary: 4500, … }
length: 7
<prototype>: Array []
(4) […]
basictag.html:53:7
0: Object { name: "Raj", age: 21, salary: 40000, … }
1: Object { name: "Aditya", age: 22, salary: 30000, … }
2: Object { name: "Jay", age: 0, salary: 20000, … }
3: Object { name: "Ajay", age: 20, salary: 10000, … }
length: 4
<prototype>: Array []
(1) […]
basictag.html:54:7
0: Object { name: "Ram", age: 0, salary: 4500, … }
length: 1
<prototype>: Array []
List (7) […]
basictag.html:70:7
0: Object { name: "Raj", age: 21, salary: 40000, … }
1: Object { name: "Rahul", age: 23, salary: 5000, … }
2: Object { name: "Aman", age: 24, salary: 4000, … }
3: Object { name: "Aditya", age: 22, salary: 30000, … }
4: Object { name: "Jay", age: 0, salary: 20000, … }
5: Object { name: "Ajay", age: 20, salary: 10000, … }
6: Object { name: "Ram", age: 0, salary: 4500, … }
length: 7
<prototype>: Array []
(5) […]
basictag.html:55:7
0: Array(3) ["For Age: 21", "Raj", "Jay"]
1: Array(3) ["For Age: 23", "Rahul", "Ram"]
2: Array ["For Age: 24", "Aman"]
3: Array ["For Age: 22", "Aditya"]