

ASSIGNMENT 5

1. Prompt for amount, interest rate and no. of years and calculate simple interest.
2. is palindrome string
3. Area of circle
4. Copy information of one object to another and log it to console.
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.

ANSWERS

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

ANS.

```
<!DOCTYPE html>
<html>

<body>

<p>Calculating the simple intrest .</p>

<button onclick="myFunction()">Try it</button>

<p id="demo"></p>

<script>
function myFunction()
{
  var amt = prompt("Please enter amount ", " ");
  var years = prompt("Please enter number of years ", " ");
  var rate = prompt("Please enter rate ", " ");
  var si;

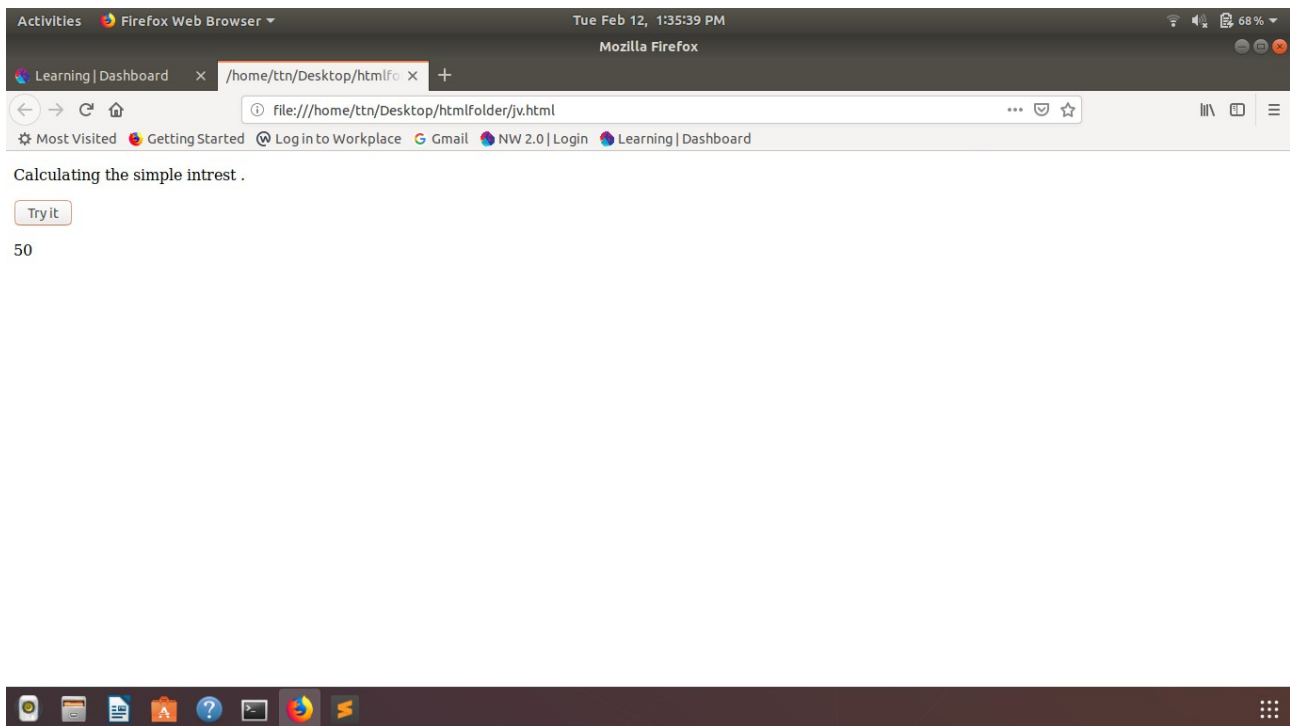
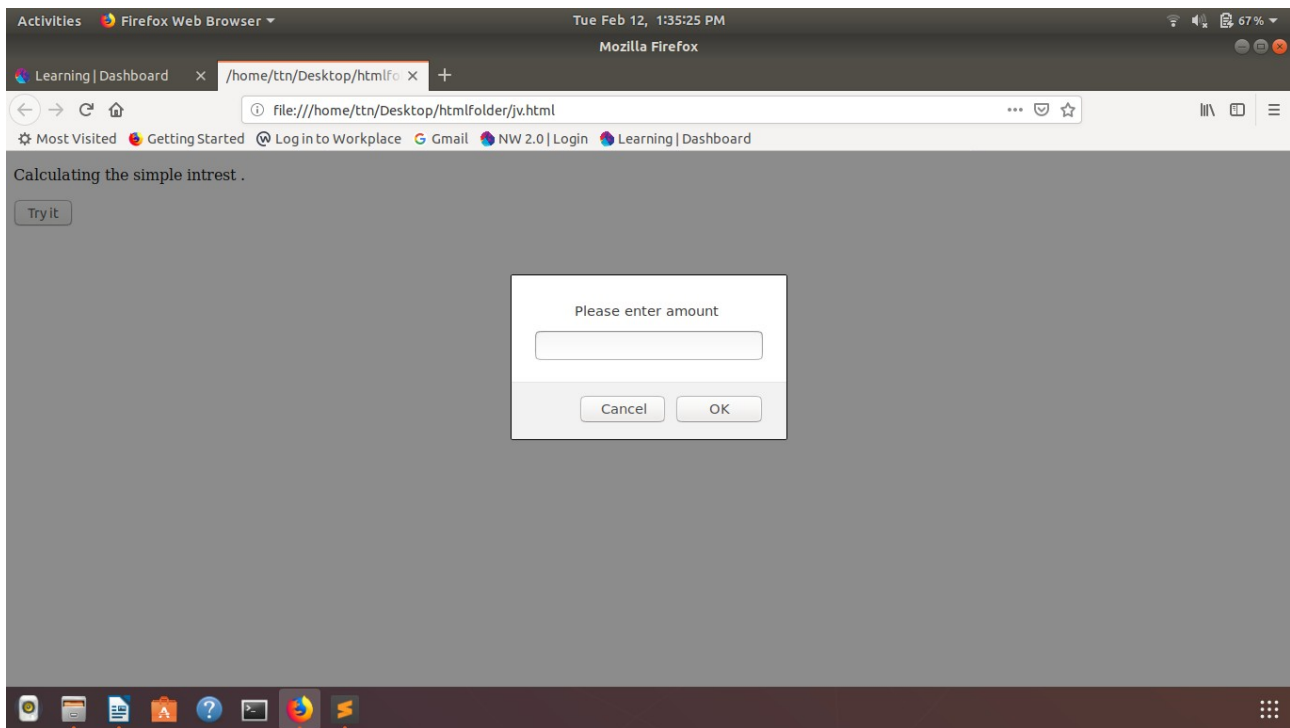
  si=((amt*years*rate)/100);

  document.getElementById("demo").innerHTML = si;

}
</script>
```

</body>

</html>



Q2.is palindrome string

ans.<!DOCTYPE html>
<html>

```
<body>

<p>Checking palindrone</p>

<button onclick="palindrome('naman')">Try it</button>

<p id="demo"></p>


<script>

function palindrome(str) {

    var len = str.length;
    var mid = Math.floor(len/2);
    var flag='false';
    for ( var i = 0; i < mid; i++ ) {
        if (str[i] !== str[len - 1 - i]) {
            flag = 'false';
        }
    }

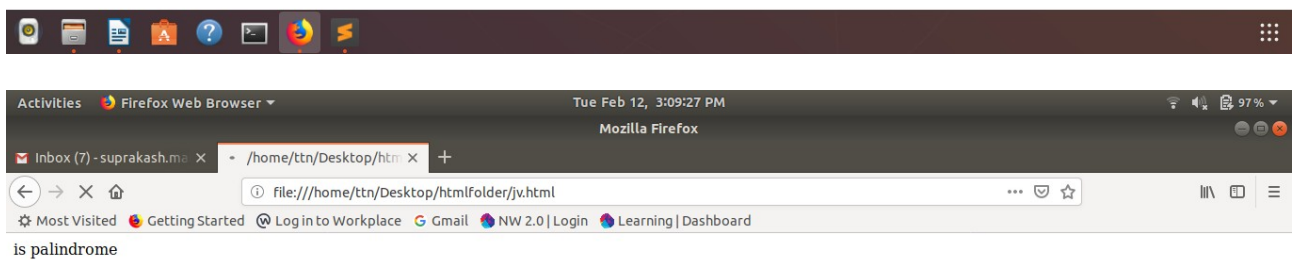
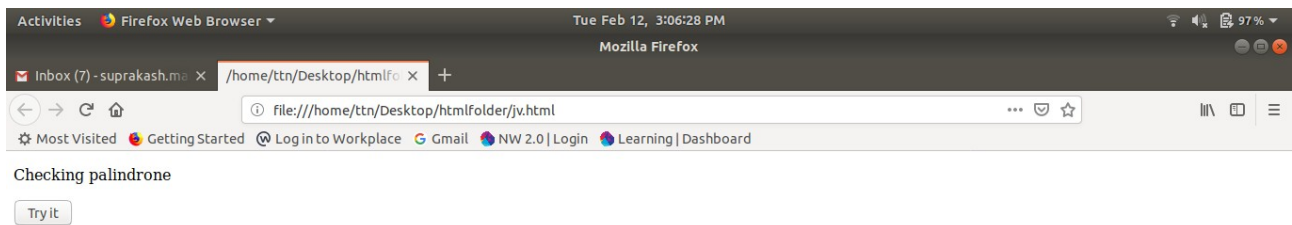
    if(flag=='false ')
        document.write("not palindrome");
    else
        document.write("is palindrome");

}

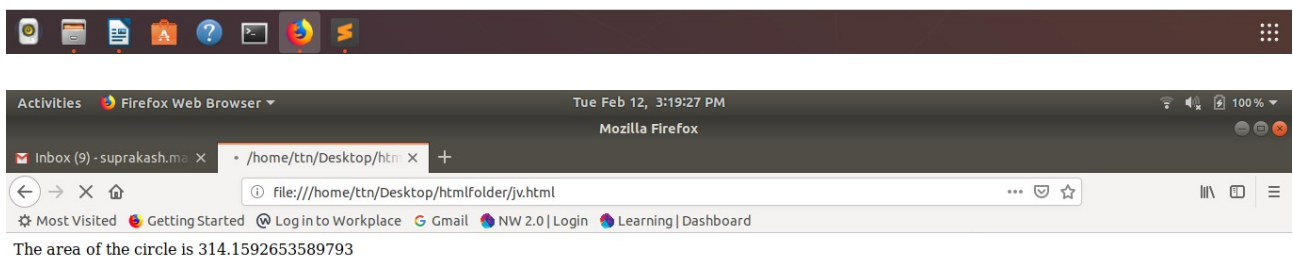
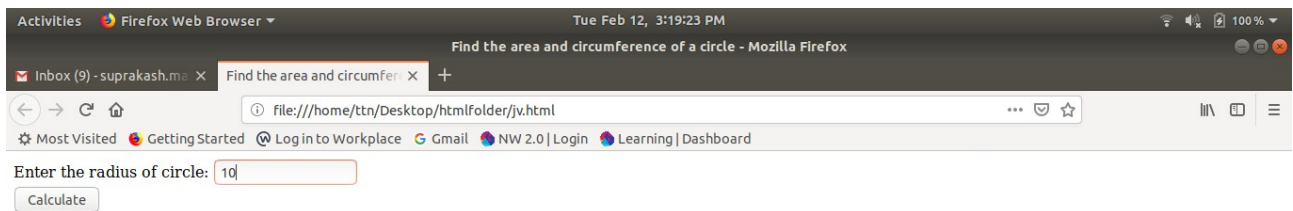
</script>

</body>

</html>
```



Q3.Area of circle
ans.



```
<html>
<head>
<title>Find the area and circumference of a circle</title>
</head>
<body>
<script language="JavaScript">
  function CalculateArea(){
    var radius =document.form1.txtRadius.value;
    document.write("<P>The area of the circle is " + (radius * radius * Math.PI) + "</p>");

  }
</script>
</body>
</html>
```

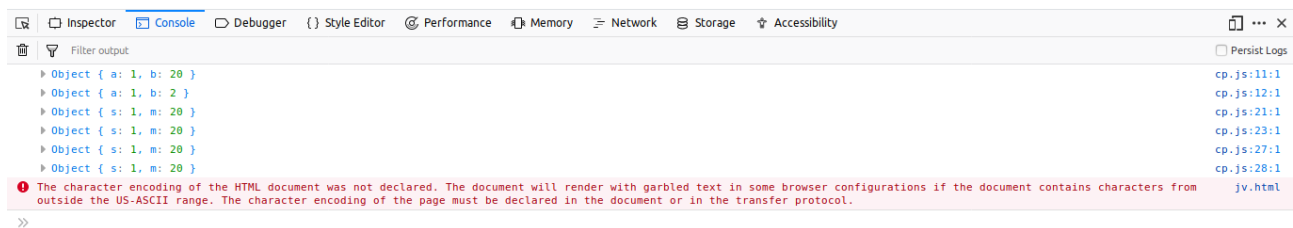
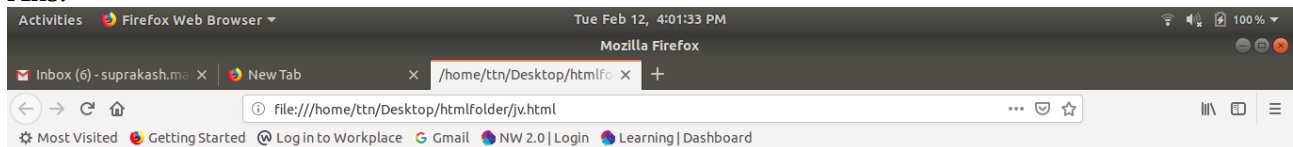
```

</script>
<form name=form1>
  Enter the radius of circle:
  <input type="text" name="txtRadius" size=10>
  <br>
  <input type="button" value="Calculate" onClick='CalculateArea();'>
</form>
</script>
</body>
</html>

```

Q4.Copy information of one object to another and log it to console.

Ans.



jv.html

```

<html>
<head>
<title></title>
</head>
<body>
  <script src="cp.js"></script>

```

```

</body>
</html>

```

cp.js

//deep copying

```
obj =  
{  
  a: 1,  
  b: 2  
}  
newObj = JSON.parse(JSON.stringify(obj));
```

```
obj.b=20;  
console.log(obj);  
console.log(newObj);
```

//shallow copy

```
a = {s:1 , m : 2}
```

```
b=a;
```

```
console.log(a);
```

```
console.log(b);
```

```
b.m=20;
```

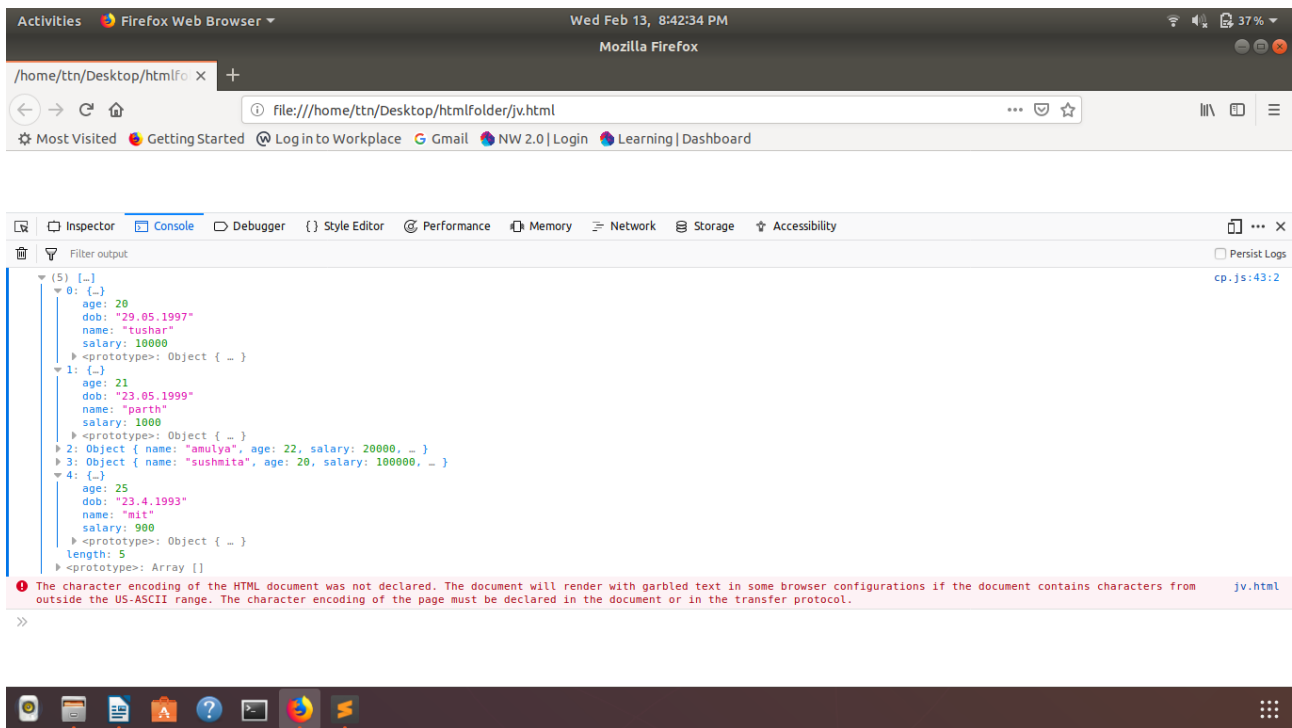
```
console.log(b);  
console.log(a);
```

Q5.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.

Ans .

A]



jv.html

```
<html>
<head>
<title></title>
</head>
<body>
  <script src="cp.js"></script>
```

```
</body>
</html>
```

cp.js

```
list =
[
{
  "name" : "tushar",
  "age" : 20 ,
  "salary" : 10000 ,
  "dob" : "29.05.1997"
},
{
  "name" : "parth",
  "age" : 21 ,
  "salary" : 1000 ,
  "dob" : "23.05.1999"
},
```



```

{
  "name" : "amulya",
  "age" : 22 ,
  "salary" : 20000 ,
  "dob" : "09.11.1996"
},

{
  "name" : "sushmita",
  "age" : 20 ,
  "salary" : 100000 ,
  "dob" : "23.12.1997"
},

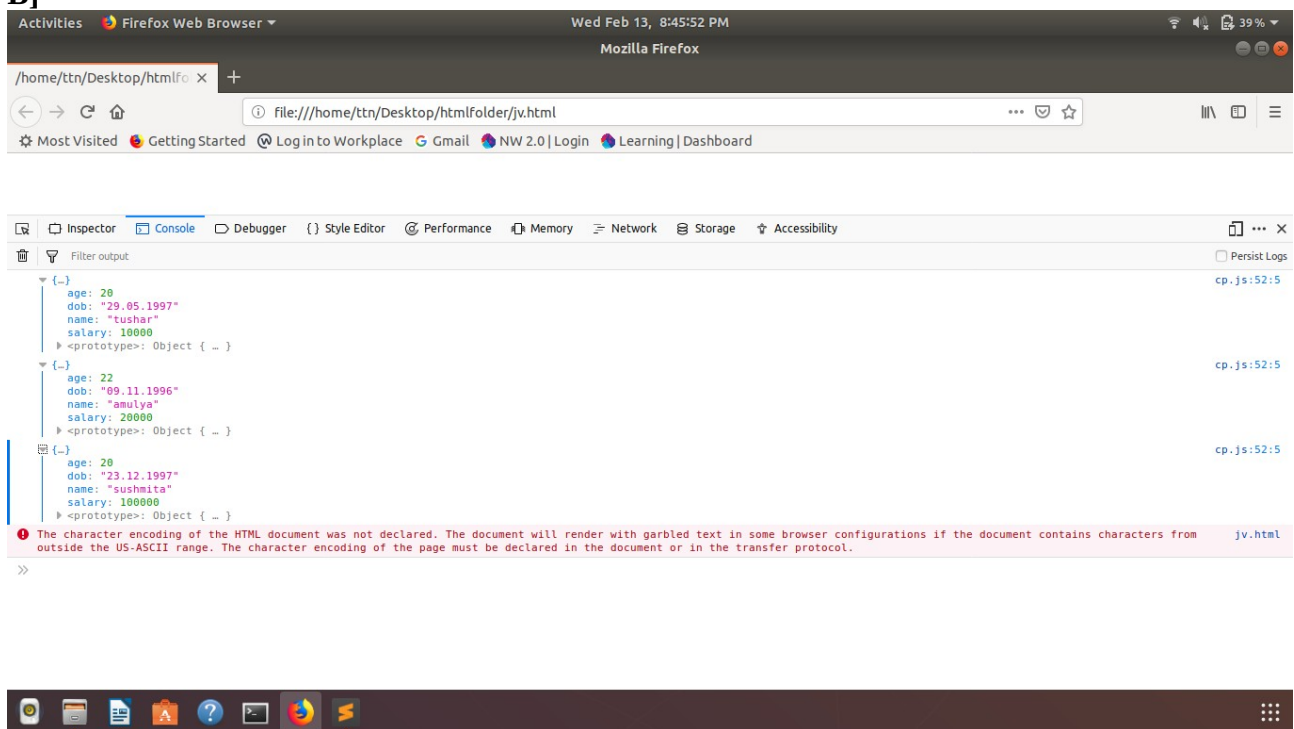
{
  "name" : "mit",
  "age" : 25 ,
  "salary" : 900 ,
  "dob" : "23.4.1993"
}

]

```

console.log(list);

B]



list =

```

[
{
  "name" : "tushar",

```

```

    "age" : 20 ,
    "salary" : 10000 ,
    "dob" : "29.05.1997"
  },

  {
    "name" : "parth",
    "age" : 21 ,
    "salary" : 1000 ,
    "dob" : "23.05.1999"
  },

  {
    "name" : "amulya",
    "age" : 22 ,
    "salary" : 20000 ,
    "dob" : "09.11.1996"
  },

  {
    "name" : "sushmita",
    "age" : 20 ,
    "salary" : 100000 ,
    "dob" : "23.12.1997"
  },

  {
    "name" : "mit",
    "age" : 25 ,
    "salary" : 900 ,
    "dob" : "23.4.1993"
  }
]

```

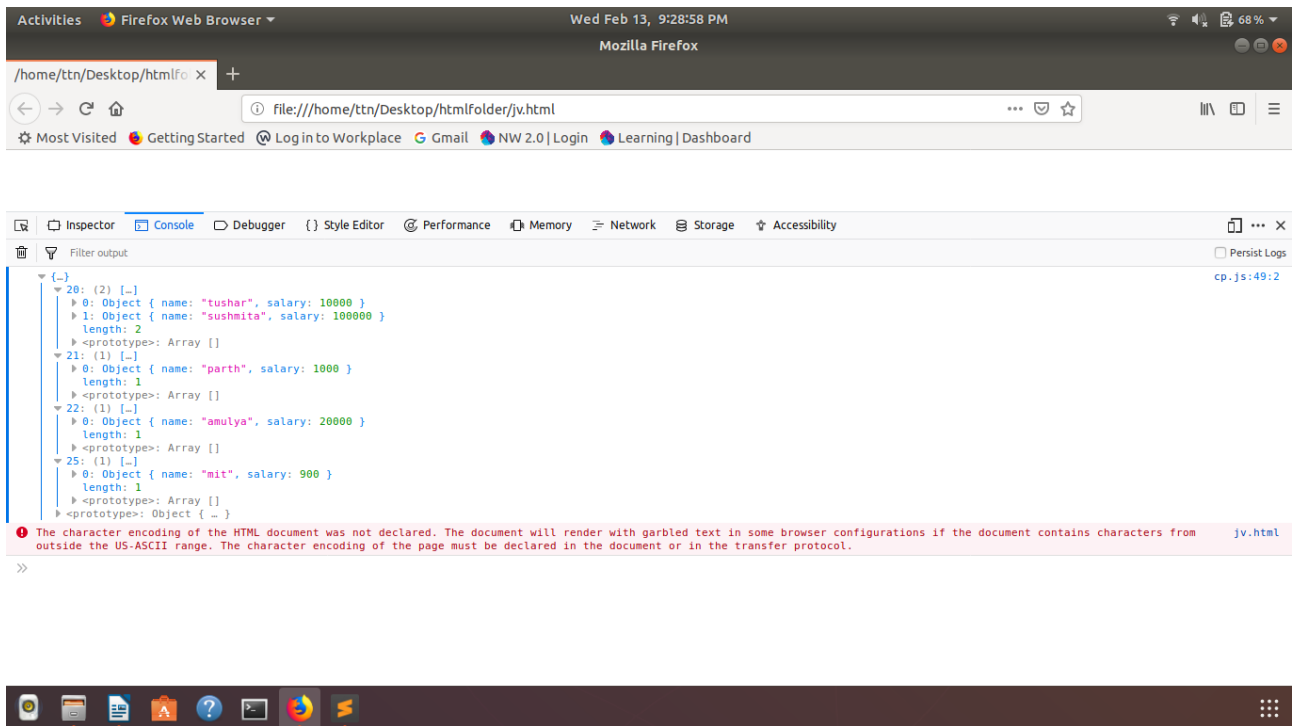
//filter all employees with salary greater than 5000

```

function chksalary()
{
    for(var i=0;i<list.length;i++)
    {
        if(list[i].salary>5000)
            console.log(list[i]);
    }
}
chksalary();

```

C]



```
list =  
[  
  {  
    "name" : "tushar",  
    "age" : 20 ,  
    "salary" : 10000 ,  
    "dob" : "29.05.1997"  
  },  
  
  {  
    "name" : "parth",  
    "age" : 21 ,  
    "salary" : 1000 ,  
    "dob" : "23.05.1999"  
  },  
  
  {  
    "name" : "amulya",  
    "age" : 22 ,  
    "salary" : 20000 ,  
    "dob" : "09.11.1996"  
  },  
  
  {  
    "name" : "sushmita",  
    "age" : 20 ,  
    "salary" : 100000 ,  
    "dob" : "23.12.1997"  
  },  
  
  {  

```

```

"name" : "mit",
"age" : 25 ,
"salary" : 900 ,
"dob" : "23.4.1993"
}
]

```

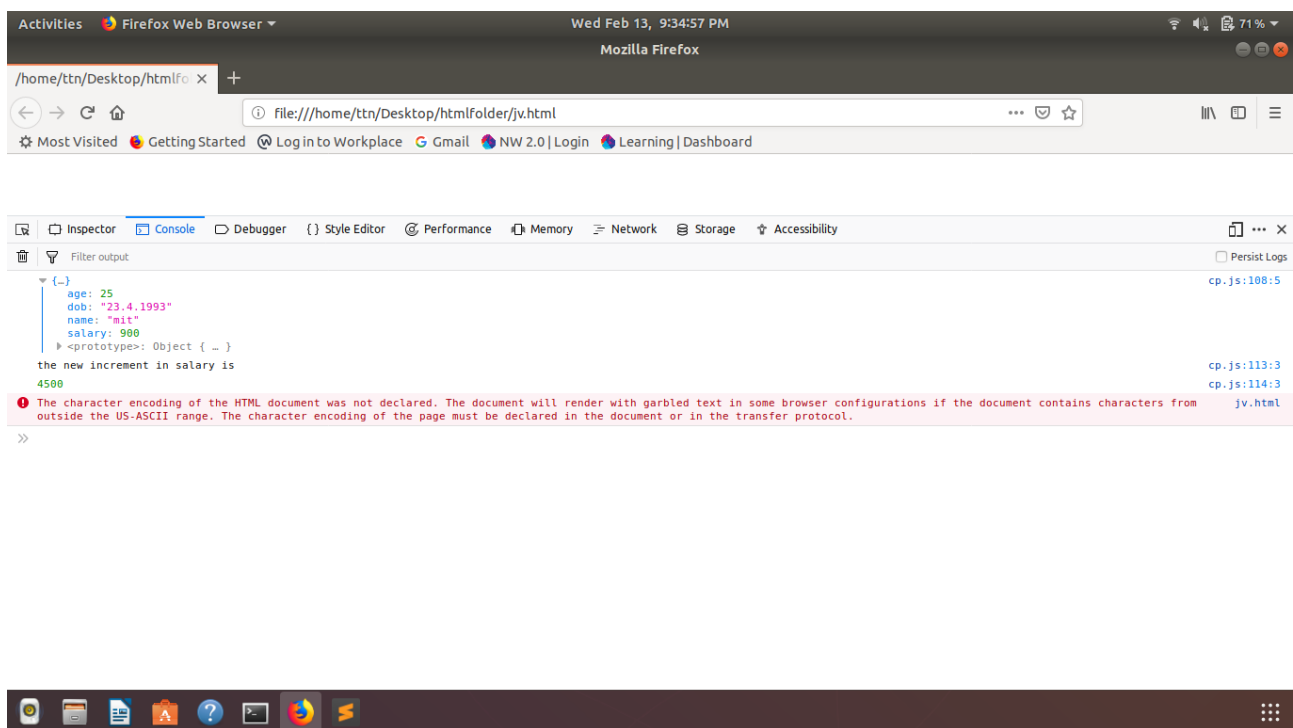
```
const result = {};
```

```

for(const {name, age, salary,dob} of list) {
  if(!result[age]) result[age] = [];
  result[age].push({ name, salary });
}
console.log(result);

```

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



```

list =
[
{
  "name" : "tushar",
  "age" : 20 ,
  "salary" : 10000 ,
  "dob" : "29.05.1997"
},

{
  "name" : "parth",

```

```

    "age" : 21 ,
    "salary" : 1000 ,
    "dob" : "23.05.1999"
  },

  {
    "name" : "amulya",
    "age" : 22 ,
    "salary" : 20000 ,
    "dob" : "09.11.1996"
  },

  {
    "name" : "sushmita",
    "age" : 20 ,
    "salary" : 100000 ,
    "dob" : "23.12.1997"
  },

  {
    "name" : "mit",
    "age" : 25 ,
    "salary" : 900 ,
    "dob" : "23.4.1993"
  }
]

function lastsal()
{
  for (var i=0;i<list.length;i++)
  {
    if(list[i].salary<1000&&list[i].age>20)
    {
      /*list[i].salary=(list[i].salary)*5;*/
      console.log(list[i]);
      break;
    }

  }
  console.log('the new increment in salary is' );
  console.log(list[i].salary*5);
}

lastsal();

```