Exercise on Javascript
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For all common webpages just by renaming the script pages. This is the html page common to all

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
        <meta charset="utf-8">
        <title>Assignment 5</title>
        <script type="text/javascript" src="salary.js">

        </script>
  </head>
  <body>

  </bod y>
</html>
```

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

```
p=prompt("enter the principal")
r=prompt("enter the rate")
t=prompt("enter the time")
function si(p,r,t){
  document.write((p*r*t)/100)

}
si(p,r,t);
```

2. is palindrome string

```
s=prompt("enter yur string")

function pal(s){
var flag=true;
var l = s.length-1;
for(var i=0; i<s.length/2;i++)
{
if(s.charAt(i)== s.charAt(l-i))
flag=true
else
flag=false
```

```
}
document.write(flag)
}

pal(s);
```

3. Area of Circle

```
s=prompt("enter the radius")

function area(){

  document.write(3.14*s*s)
}

area(s);
```

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

```
var object1 = {
  a: 1,
  b: 2,
  c: 3
};

var object2 = Object.assign(object1);
console.log(object2);
```

5.

1. 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.

```
// List of Objects of Employees
// Fields of Object are Name, Age, Salary, DOB
var employee_list = [
```

```
        { name: 'Anindya', age: 22, salary: 5000, dob: '7-7-1996'},
        { name: 'Rhik', age: 30, salary: 8000, dob: '5-11-1988'},
        { name: 'Akash', age: 45, salary: 3000, dob: '24-4-1973'},
        { name: 'Spandan', age: 45, salary: 2000, dob: '10-7-1973'},
        { name: 'Tania', age: 21, salary: 500, dob: '18-4-1997'},
        { name: 'Arpita', age: 18, salary: 800, dob: '11-10-2000'}
];
document.write("(Part1) <br> List of objects of Employee are:- <br>")
employee_list.forEach(
        function(ele){
        document.write(JSON.stringify(ele) + "<br>")
        }
)

// Filter all employees with salary greater than 5000
document.write("<br> (Part 2) <br> All employees with salary greater than 5000 are:- <br>")
c = 0
employee_list.forEach(
        function(ele){
        if (ele.salary >= 5000){
        c++
        document.write(c + ". " + ele.name + "<br>")
        }
        }
)

// Group employees on the basis of their age
Array.prototype.groupBy = function(prop) {
        return this.reduce(function(groups, item) {
        const val = item[prop]
        groups[val] = groups[val] || []
        groups[val].push(item)
        return groups
        }, {})
 }

document.write("<br> (Part3) <br> Grouped the objects of Employee by Age:- <br>")
document.write(JSON.stringify(employee_list.groupBy("age")) + "<br>");

// Fetch employees with salary less than 1000 and age greater than 20.
// Then give them an increment 5 times their salary.
document.write("<br> (Part 4) <br> All employees with salary less than 1000 and age greater
than 20 are:- <br>")
```

```
c = 0
employee_list.forEach(
        function(ele){
        if (ele.salary < 1000 && ele.age>20){
        c++
        document.write(c + ". " + ele.name + ": " + ele.salary + "<br>")
        }
        }
)

document.write("<br> And now their salaries are incremented by 5 times:- <br>")
c = 0
employee_list.forEach(
        function(ele){
        if (ele.salary < 1000 && ele.age>20){
        c++
        ele.salary *=5
        document.write(c + ". " + ele.name + ": " + ele.salary + "<br>")
        }
        }
)
```