

JAVASCRIPT ASSIGNMENT

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

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 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.)

This page says

Please enter Amount

Cancel OK

OUTPUT 3.)

This page says

Please enter Rate

Cancel OK

-->

This page says

Please enter No. of years

Cancel OK

OUTPUT 4.)

-->

Simple Interest

Simple Interest (calculated anually) is: 9.523809523809524

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>
```

OUTPUT 1.)

Click to Check Palindrome

OUTPUTS:-

OUTPUT 2.)

OUTPUT 3.)

This page says
Please enter the String

nitin

Cancel

OK

TRUE

This page says
Please enter the String

intyni

Cancel

OK

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.)

Calculate area of the cricle

OUTPUT 2.)

This page says

Please enter Radius

Cancel OK

OUTPUT 3.)

AREA OF CIRCLE IS78.53981633974483

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

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 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>

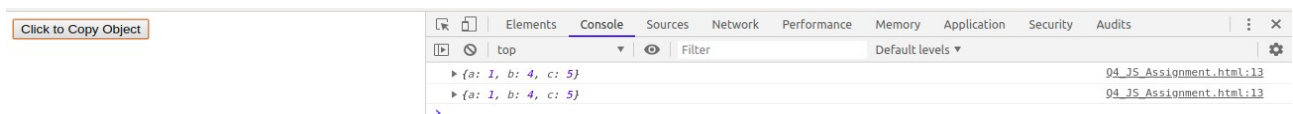
</body>
</html>
```

OUTPUTS:-

OUTPUT 1.)

Click to Copy Object

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:'Mitin',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.):-

```
▼ (2) [{...}, {...}] 05_JS_Assignment.html:29
  ▶ 0: {name: "Aditiya", age: 21, salary: 8000, DOB: -1981}
  ▶ 1: {name: "Aariv", age: 25, salary: 8000, DOB: -1981}
    length: 2
  ▶ __proto__: Array(0)
```

- group employee on the basis of their age.

OUTPUT 3.):-

```
05_JS_Assignment.html:52
▼ {12: Array(1), 14: Array(2), 16: Array(1), 21: Array(3), 22: Array(1), 25: Array(2), 31: Array(1)}
  ▼ 12: Array(1)
    ▶ 0: {name: "Varun", age: 12, salary: 300, DOB: -1981}
      length: 1
    ▶ __proto__: Array(0)
  ▼ 14: Array(2)
    ▶ 0: {name: "Apoorva", age: 14, salary: 5000, DOB: -1981}
    ▶ 1: {name: "Saket", age: 14, salary: 2000, DOB: -1981}
      length: 2
    ▶ __proto__: Array(0)
  ▼ 16: Array(1)
    ▶ 0: {name: "Devansh", age: 16, salary: 800, DOB: -1981}
      length: 1
    ▶ __proto__: Array(0)
  ▼ 21: Array(3)
    ▶ 0: {name: "Siddhant", age: 21, salary: 4995, DOB: -1981}
    ▶ 1: {name: "Avi", age: 21, salary: 4000, DOB: -1981}
    ▶ 2: {name: "Aditiya", age: 21, salary: 8000, DOB: -1981}
      length: 3
    ▶ __proto__: Array(0)
  ▼ 22: Array(1)
    ▶ 0: {name: "Jay", age: 22, salary: 1000, DOB: -1981}
      length: 1
    ▶ __proto__: Array(0)
  ▼ 25: Array(2)
    ▶ 0: {name: "Aariv", age: 25, salary: 8000, DOB: -1981}
    ▶ 1: {name: "Nitin", age: 25, salary: 4000, DOB: -1981}
      length: 2
    ▶ __proto__: Array(0)
  ▼ 31: Array(1)
    ▶ 0: {name: "Bhupesh", age: 31, salary: 5000, DOB: -1981}
      length: 1
    ▶ __proto__: Array(0)
  ▶ __proto__: Object
```

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

OUTPUT 4.):-

```

▼ (4) [{...}, {...}, {...}, {...}] 05_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:-

