Introduction to Javascript
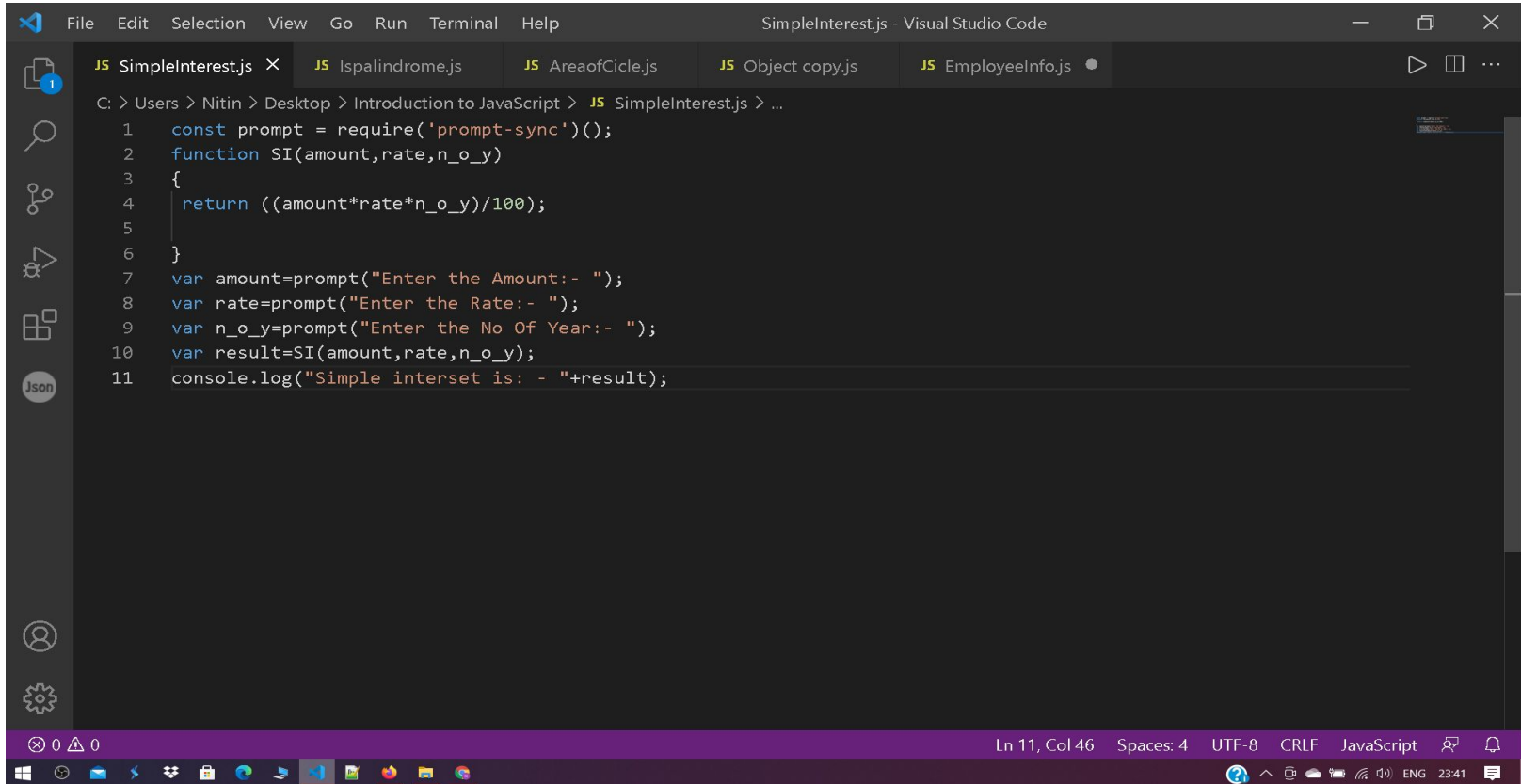
by Nitin kumar

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


```javascript
const prompt = require('prompt-sync')();
function SI(amount,rate,n_o_y)
{
 return ((amount*rate*n_o_y)/100);

}
var amount=prompt("Enter the Amount:- ");
var rate=prompt("Enter the Rate:- ");
var n_o_y=prompt("Enter the No Of Year:- ");
var result=SI(amount,rate,n_o_y);
console.log("Simple interset is: - "+result);
```

Output

```
PS C:\Users\Nitin> node "c:\Users\Nitin\Desktop\Introduction to JavaScript\SimpleInterest.js"
Enter the Amount:- 2000
Enter the Rate:- 2
Enter the No Of Year:- 4
Simple interset is: - 160
PS C:\Users\Nitin>
```

TO THE NEW

```
File   Edit   Selection   View   Go   Run   Terminal   Help          Ispalindrome.js - Visual Studio Code

JS SimpleInterest.js        JS Ispalindrome.js  ×     JS AreaofCicle.js        JS Object copy.js        JS EmployeeInfo.js

C: > Users > Nitin > Desktop > Introduction to JavaScript > JS Ispalindrome.js > ispalindrome

  1    const prompt = require('prompt-sync')();
  2    function ispalindrome(str)
  3    {
  4        var newstr="";
  5        for(var i=str.length-1;i>=0;i--)
  6        newstr+=str[i];
  7        for(var i=0;i<str.length;i++)
  8        {
  9            if(str[i]!=newstr[i])
 10            return false;
 11
 12        }
 13        return true;
 14
 15    }
 16    var str=prompt("Enter A String :- ");
 17    var result=ispalindrome(str);
 18    console.log(result);
```

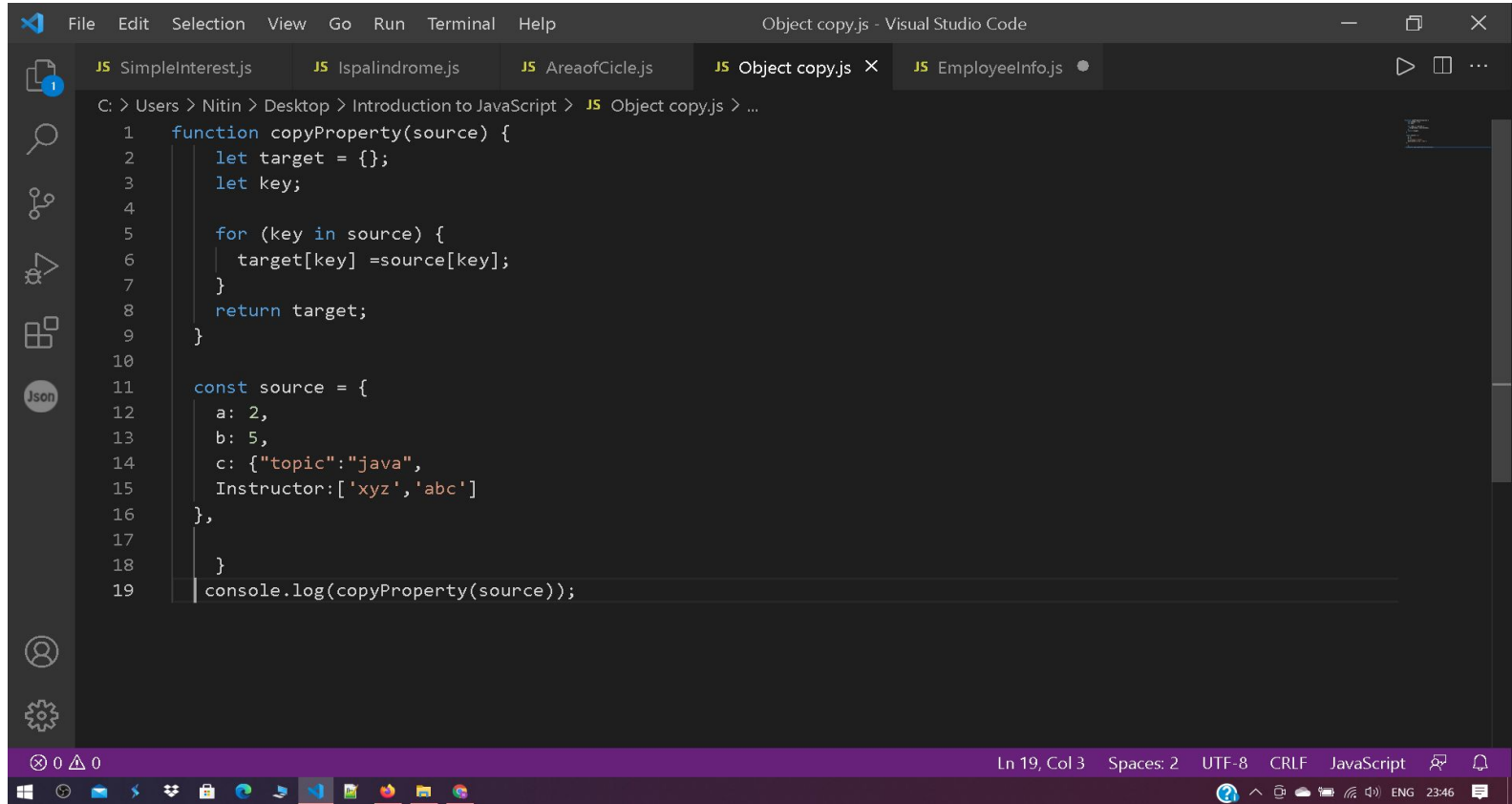Ln 13, Col 17   Spaces: 4   UTF-8   CRLF   JavaScript

Output

```
PS C:\Users\Nitin> node "c:\Users\Nitin\Desktop\Introduction to JavaScript\Ispalindrome.js"
Enter A String :- nitin
true
PS C:\Users\Nitin> node "c:\Users\Nitin\Desktop\Introduction to JavaScript\Ispalindrome.js"
Enter A String :- amit
false
PS C:\Users\Nitin>
```

```javascript
const prompt = require('prompt-sync')();
function Area(radius)
{
return Math.PI*radius*radius;
}
var radius=prompt("Enter the Radius: - ");
var result=Area(radius);
console.log(result);
```

Output

```
PS C:\Users\Nitin> node "c:\Users\Nitin\Desktop\Introduction to JavaScript\AreaofCicle.js"
Enter the Radius: - 5
78.53981633974483
```

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

```
File   Edit   Selection   View   Go   Run   Terminal   Help                Object copy.js - Visual Studio Code

JS SimpleInterest.js     JS Ispalindrome.js     JS AreaofCicle.js     JS Object copy.js  ✕     JS EmployeeInfo.js

C: > Users > Nitin > Desktop > Introduction to JavaScript > JS Object copy.js > ...
   1    function copyProperty(source) {
   2        let target = {};
   3        let key;
   4
   5        for (key in source) {
   6          target[key] =source[key];
   7        }
   8        return target;
   9    }
  10
  11    const source = {
  12      a: 2,
  13      b: 5,
  14      c: {"topic":"java",
  15      Instructor:['xyz','abc']
  16    },
  17
  18      }
  19    console.log(copyProperty(source));
```

Ln 19, Col 3   Spaces: 2   UTF-8   CRLF   JavaScript

Output

```
PS C:\Users\Nitin> node "c:\Users\Nitin\Desktop\Introduction to JavaScript\Object copy.js"
{ a: 2, b: 5, c: { topic: 'java', Instructor: [ 'xyz', 'abc' ] } }
PS C:\Users\Nitin>
```

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.

File Edit Selection View Go Run Terminal Help

JS SimpleInterest.js | JS Ispalindrome.js | JS AreaofCicle.js | JS Object copy.js | JS EmployeeInfo.js ✕
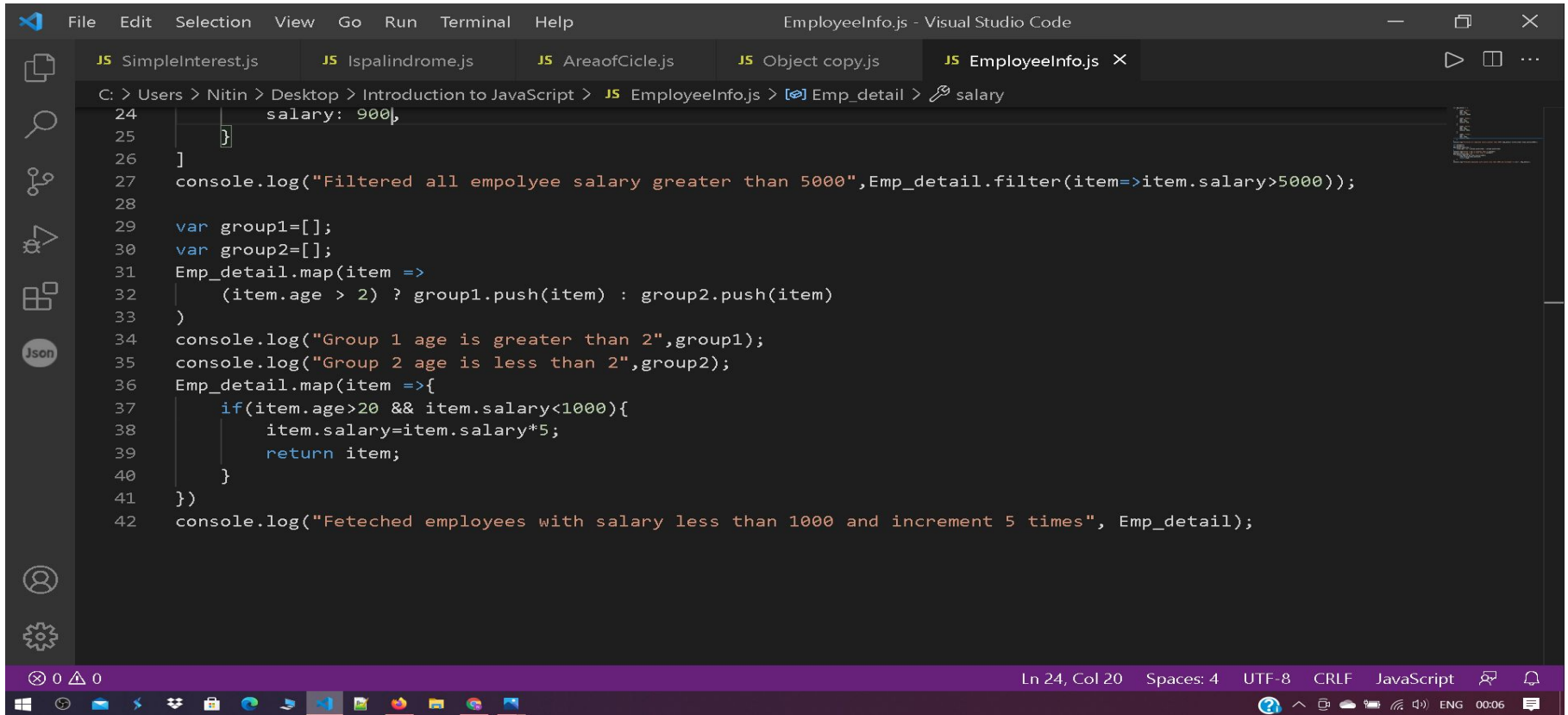
C: > Users > Nitin > Desktop > Introduction to JavaScript > JS EmployeeInfo.js > [∅] Emp_detail > 🔑 salary

```javascript
1    var Emp_detail = [
2        {
3            name: 'amit',
4            age: 30,
5            dob: 1990,
6            salary: 10000
7        },
8        {
9            name: 'Rahul',
10           age: 34,
11           dob: 1988,
12           salary: 120,
13       },
14       {
15           name: 'Parth',
16           age: 30,
17           dob: 1992,
18           salary: 3000,
19       },
20       {
21           name: 'rishi',
22           age: 4,
23           dob: 1993,
24           salary: 900,
25       }
```

⊗ 0 ⚠ 0   Ln 24, Col 20   Spaces: 4   UTF-8   CRLF   JavaScript

```js
 24            salary: 900,
 25        }
 26    ]
 27    console.log("Filtered all empolyee salary greater than 5000",Emp_detail.filter(item=>item.salary>5000));
 28
 29    var group1=[];
 30    var group2=[];
 31    Emp_detail.map(item =>
 32        (item.age > 2) ? group1.push(item) : group2.push(item)
 33    )
 34    console.log("Group 1 age is greater than 2",group1);
 35    console.log("Group 2 age is less than 2",group2);
 36    Emp_detail.map(item =>{
 37        if(item.age>20 && item.salary<1000){
 38            item.salary=item.salary*5;
 39            return item;
 40        }
 41    })
 42    console.log("Feteched employees with salary less than 1000 and increment 5 times", Emp_detail);
```

```
PS C:\Users\Nitin> node "c:\Users\Nitin\Desktop\Introduction to JavaScript\EmployeeInfo.js"
Filtered all empolyee salary greater than 5000 [
  { name: 'amit', age: 30, dob: 1990, salary: 10000 },
  { name: 'rishi', age: 4, dob: 1993, salary: 9000 }
]
Group 1 age is greater than 2 [
  { name: 'amit', age: 30, dob: 1990, salary: 10000 },
  { name: 'Rahul', age: 34, dob: 1988, salary: 1200 },
  { name: 'Parth', age: 30, dob: 1992, salary: 3000 },
  { name: 'rishi', age: 4, dob: 1993, salary: 9000 }
]
Group 2 age is less than 2 []
Feteched employees with salary less than 1000 and increment 5 times [
  { name: 'amit', age: 30, dob: 1990, salary: 10000 },
  { name: 'Rahul', age: 34, dob: 1988, salary: 1200 },
  { name: 'Parth', age: 30, dob: 1992, salary: 3000 },
  { name: 'rishi', age: 4, dob: 1993, salary: 9000 }
]
```