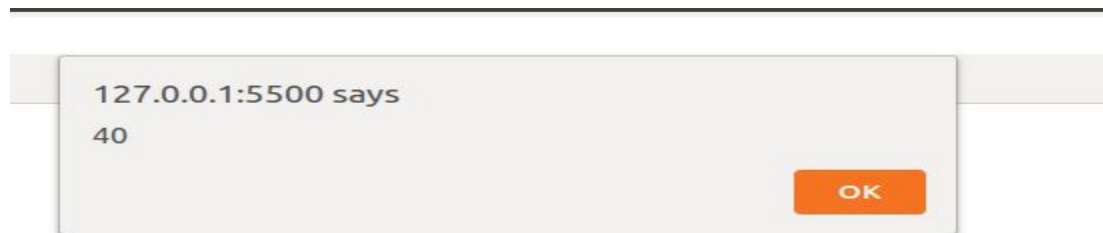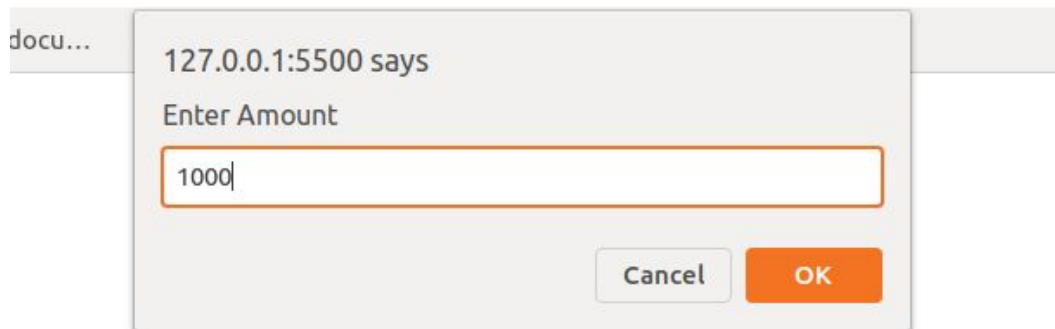Q.1 Prompt for amount, interest rate and no. of years and calculate simple interest.
Code-

```
function simpleInterest(a,r,t){
  let si = (a*r*t)/100;
  return si;
}

let s = prompt("Enter Amount");
let r = prompt("Enter Interest Rate");
let t = prompt("Enter No.Of Years");
let result =simpleInterest(s,r,t);
alert(result)
```

Output -

docu...

127.0.0.1:5500 says

Enter Amount

1000

Cancel   OK

127.0.0.1:5500 says
40

OK

Q .2 is palindrome string.
Code –

```javascript
function palindrome(a){
    let len = a.length
    for(let i=0;i<len/2;i++){
      if( a[i]!==a[len-1-i]){
          return false;
      }
      return true;
    }
}
console.log(palindrome('eye'));
Output - true
```

Q.3 Area of circle
Code -

```javascript
const area =(radius)=>{
        return 3.14*radius*radius;
}

let r = prompt("Enter radius of circle");
let a=area(r)
alert("Area Of Circle: "+a);
```

Live Demo -

127.0.0.1:5500 says

Enter radius of circle

10

Cancel   OK

127.0.0.1:5500 says

Area Of Circle: 314

OK

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

```
let old ={
  "first" : 'taman',
  "last": 'gupta',
  "mobile" :702521623
}
console.log(old);
let copiedObject ={...old}
console.log(copiedObject)
```

Live Demo-

▼ {first: "taman", last: "gupta", mobile: 702521623} ⓘ
    first: "taman"
    last: "gupta"
    mobile: 702521623
    ▶ __proto__ : Object
▼ {first: "taman", last: "gupta", mobile: 702521623} ⓘ
    first: "taman"
    last: "gupta"
    mobile: 702521623
    ▶ __proto__ : Object
>

Q.5 create a list of objects of Employee with info as follow :
● Name, age, salary ,DOB

Code -

```
const emp = [
  {
    'name':'akash',
    'age':22,
    'salary':15000,
    'DOB': '1/1/1998'
  },
  {
    'name':'taman',
    'age':21,
    'salary':5000,
    'DOB': '4/10/1998'
  },
  {
    'name':'ravi',
    'age':23,
    'salary':800,
    'DOB': '4/3/1996'
  },
  {
    'name':'amit',
    'age':21,
```

```
        'salary':80,
        'DOB': '9/5/1999'
    },
    {
        'name':'amitesh',
        'age':23,
        'salary':6000,
        'DOB': '3/1/1997'

    }


]
for (const iterator of emp) {
    console.log(iterator)
}
```

Output-

```
▶ {name: "akash", age: 22, salary: 15000, DOB: "1/1/1998"}
▶ {name: "taman", age: 21, salary: 5000, DOB: "4/10/1998"}
▶ {name: "ravi", age: 23, salary: 800, DOB: "4/3/1996"}
▶ {name: "amit", age: 21, salary: 80, DOB: "9/5/1999"}
▶ {name: "amitesh", age: 23, salary: 6000, DOB: "3/1/1997"}
>
```

- filter all employees with salary greater than 5000

```
const re=emp.filter(emps=>emps.salary>5000);
console.log(re);
```

Output -

```
▼ (2) [{…}, {…}] ℹ
  ▶ 0: {name: "akash", age: 22, salary: 15000, DOB: "1/1/1998"}
  ▶ 1: {name: "amitesh", age: 23, salary: 6000, DOB: "3/1/1997"}
    length: 2
  ▶ __proto__: Array(0)
```

- group employee on the basis of their age

```
let group = emp.reduce(function(a,b){
  a[b.age] = a[b.age] || [];
  a[b.age].push(b);
  return a;
},Object.create(null));
console.log(group);
```

Output -

```
▼ {21: Array(2), 22: Array(1), 23: Array(2)} ⓘ
  ▼ 21: Array(2)
    ▶ 0: {name: "taman", age: 21, salary: 5000, DOB: "4/10/1998"}
    ▶ 1: {name: "amit", age: 21, salary: 80, DOB: "9/5/1999"}
      length: 2
    ▶ __proto__: Array(0)
  ▼ 22: Array(1)
    ▶ 0: {name: "akash", age: 22, salary: 15000, DOB: "1/1/1998"}
      length: 1
    ▶ __proto__: Array(0)
  ▼ 23: Array(2)
    ▶ 0: {name: "ravi", age: 23, salary: 800, DOB: "4/3/1996"}
    ▶ 1: {name: "amitesh", age: 23, salary: 6000, DOB: "3/1/1997"}
      length: 2
    ▶ __proto__: Array(0)
```

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

Code -

```
let re = emp.filter(emps=> emps.salary<1000&&emps.salary>20);

console.log(re);

for (const i of re) {

        i.salary= i.salary*5;

}
```

```
▼ (2) [{…}, {…}] ⓘ
  ▶ 0: {name: "ravi", age: 23, salary: 4000, DOB: "4/3/1996"}
  ▶ 1: {name: "amit", age: 21, salary: 400, DOB: "9/5/1999"}
    length: 2
  ▶ __proto__: Array(0)
```

Output – |