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Batch 2
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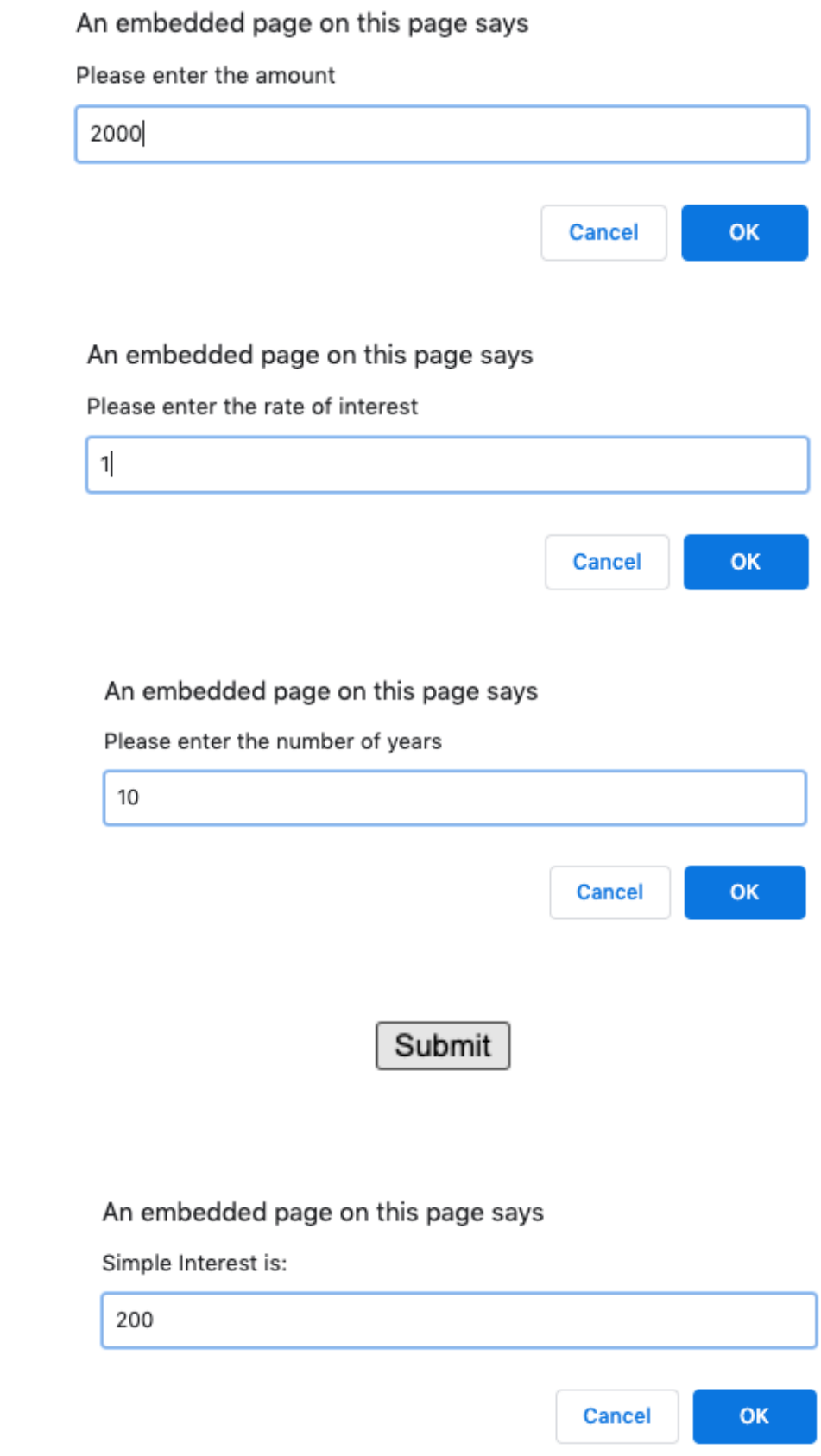
INTRODUCTION TO JAVASCRIPT Assignment

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

```
<html>
<head>
<title>JavaScript Program to find Simple Interest</title>
</head>
<body>
<table>

<tr>
<td> <button onclick = "SI()" >Submit</button> </td>
</tr>
</body>

<script type="text/javascript">

var Amount = prompt("Please enter the amount", "0");
var InterestRate = prompt("Please enter the rate of interest",
"0");
var Years = prompt("Please enter the number of years", "0");

function SI()
{
si = parseInt((Amount*InterestRate*Years)/100 );
var SimpleInterest = prompt("Simple Interest is:",+si);
}

</script>
</html>
```

OUTPUT:


An embedded page on this page says
Please enter the amount
2000
Cancel
OK
An embedded page on this page says
Please enter the rate of interest
1
Cancel
OK
An embedded page on this page says
Please enter the number of years
10
Cancel
OK
Submit
An embedded page on this page says
Simple Interest is:
200
Cancel
OK

2. is palindrome string

```
> function check_Palindrome(str_entry){

    var word = str_entry.toLowerCase().replace(/[^a-zA-Z0-9]+/g,'');
     var c = 0;

     if(word===="") {
         console.log("Nothing found!");
         return false;
     }

     if ((word.length) % 2 === 0) {
         c = (word.length) / 2;
     } else {

         if (word.length === 1) {
             console.log("Entered word is a palindrome.");
             return true;
         } else {

             c = (word.length - 1) / 2;
         }
     }

     for (var i = 0; i < c; i++) {

         if (word[i] != word.slice(-1-i)[0]) {
             console.log("Entered word is not a palindrome.");
             return false;
         }
     }
     console.log("The entry is a palindrome.");
     return true;
}

check_Palindrome('madam');
check_Palindrome('refer');
check_Palindrome('tea');
check_Palindrome('lol');
```

OUTPUT:

```
The entry is a palindrome.                    VM153:31
The entry is a palindrome.                    VM153:31
Entered word is not a palindrome.             VM153:27
The entry is a palindrome.                    VM153:31
< true
```

3. Area of circle.

```
> function circle(r)
  {
      this.r = r;

      this.area = function ()
      {
          return Math.PI * this.r * this.r;
      };
  }
  var c = new circle(3);
  console.log('Area =', c.area().toFixed(2));
```

OUTPUT:

```
Area = 28.27                                                    VM297:11
```

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

```
> var obj = {
    K: "Kavya",
    C: "dink" ,
  };
  let copy = obj;

  obj.K = "Casshyap";
  console.log(copy.K);
```

OUTPUT:

```
Casshyap                                                        VM458:8
```

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.

OUTPUT:

```
> var list = [
      { name: "Kavya", age: 22, salary:60000, DOB:"06/12/1998"},
      { name: "Anshika", age: 26, salary: 80000, DOB:"10/10/1994"},
      { name: "Prateek", age: 22, salary: 70000, DOB:"20/02/1994"},
      { name: "Sid", age: 23, salary: 40000, DOB:"11/11/1997"},
  ];
<- undefined
> l=list.length;
<- 4

> for( var i=0; i<l; i++)
  if(list[i].salary>50000)
  console.log(list[i].name);
  Kavya                                                    VM1708:3
  Anshika                                                  VM1708:3
  Prateek                                                  VM1708:3
```

Grouping of employees based on their age.

```
> var list = [
      { name: "Kavya", age: 22, salary:60000, DOB:"06/12/1998"},
      { name: "Anshika", age: 26, salary: 80000, DOB:"10/10/1994"},
      { name: "Prateek", age: 22, salary: 70000, DOB:"20/02/1994"},
      { name: "Sid", age: 23, salary: 40000, DOB:"11/11/1997"},
  ];
<- undefined

> function groupage(arr_list, pro_salary)
  {
      var i=0, val, index,
      values=[], result =[];
      for(; i<arr_list.length; i++)
      {
          val=arr_list[i][pro_salary];
          index=values.indexOf(val);
          if(index>-1)
              result[index].push(arr_list[i]);
          else{
              values.push(val);
              result.push([arr_list[i]]);
          }
      }
  return result;
  }
  var obj = groupage(list, "age");
<- undefined
> console.log(obj);
```

```
▼ (3) [Array(2), Array(1), Array(1)]
  ▼ 0: Array(2)
    ▶ 0: {name: "Kavya", age: 22, salary: 60000, DOB: "06/12/1998"}
    ▶ 1: {name: "Prateek", age: 22, salary: 70000, DOB: "20/02/1994"}
      length: 2
    ▶ __proto__: Array(0)
  ▼ 1: Array(1)
    ▶ 0: {name: "Anshika", age: 26, salary: 80000, DOB: "10/10/1994"}
      length: 1
    ▶ __proto__: Array(0)
  ▼ 2: Array(1)
    ▶ 0: {name: "Sid", age: 23, salary: 40000, DOB: "11/11/1997"}
      length: 1
    ▶ __proto__: Array(0)
    length: 3
  ▶ __proto__: Array(0)
```

```
undefined
```

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

```
> var list = [
      { name: "Kavya", age: 22, salary:60000, DOB:"06/12/1998"},
      { name: "Anshika", age: 26, salary: 80000, DOB:"10/10/1994"},
      { name: "Prateek", age: 22, salary: 70000, DOB:"20/02/1994"},
      { name: "Sid", age: 23, salary: 998, DOB:"11/11/1997"},
];
undefined
> l=list.lenght;
undefined
> len=list.length;
4
> var filter_list=[];
undefined
```

```
> for(var i=0; i<len; i++)
  if(list[i].salary<1000 && list[i].age>20)
  filter_list.push(list[i]);
1
> lenn=filter_list.length;
1
```

```
> for(var j=0; j<lenn; j++)
filter_list[j].salary *= 5;
4990
> filter_list
▼ [{…}]
  ▶ 0: {name: "Sid", age: 23, salary: 4990, DOB: "11/11/1997"}
    length: 1
  ▶ __proto__: Array(0)
>
```