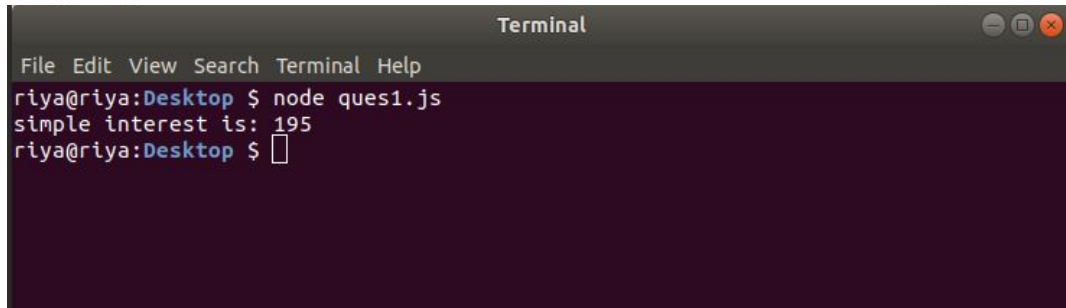


SESSION-7

INTRODUCTION TO JAVASCRIPT

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

```
var t = 2;  
var pri = 1500;  
var roi = 6.5;  
var si = (t*pri*roi)/100;  
console.log("simple interest is: "+si);
```

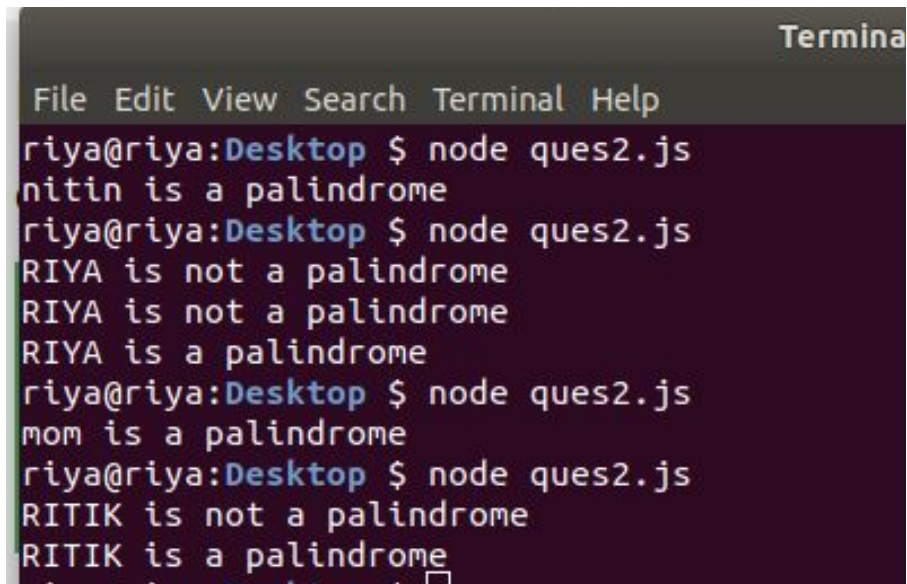
A screenshot of a macOS Terminal window titled "Terminal". The window has a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal content shows the command "node ques1.js" being executed, which outputs "simple interest is: 195". The prompt "riya@riya:Desktop \$" is visible on each line.

```
riya@riya:Desktop $ node ques1.js  
simple interest is: 195  
riya@riya:Desktop $
```

2. is palindrome string

```
var x = isPalindrome('RITIK');
```

```
function isPalindrome(word){  
  var i,wLength = word.length-1,wLengthToCompare = wLength/2;  
  
  for (i = 0; i <= wLengthToCompare ; i++) {  
    if (word.charAt(i) != word.charAt(wLength-i)) {  
      console.log(word+" is not a palindrome");  
    }  
  }  
  console.log(word+" is a palindrome");  
}
```



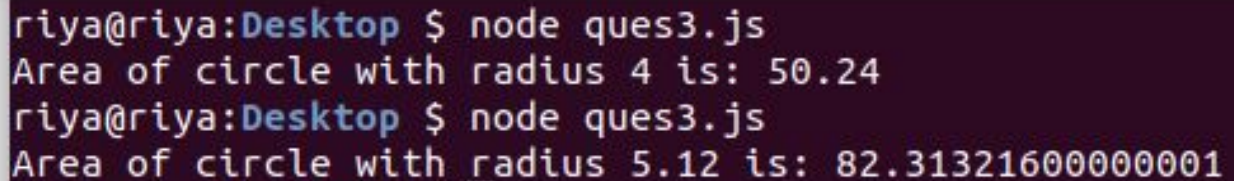
The screenshot shows a terminal window with a dark background and light-colored text. The title bar at the top right says "Terminal". The menu bar at the top includes "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal content shows the following sequence of commands and outputs:

```
riya@riya:Desktop $ node ques2.js  
nitin is a palindrome  
riya@riya:Desktop $ node ques2.js  
RIYA is not a palindrome  
RIYA is not a palindrome  
RIYA is a palindrome  
riya@riya:Desktop $ node ques2.js  
mom is a palindrome  
riya@riya:Desktop $ node ques2.js  
RITIK is not a palindrome  
RITIK is a palindrome
```

3. Area of circle

```
var r = areaOfCircle(5.12);
```

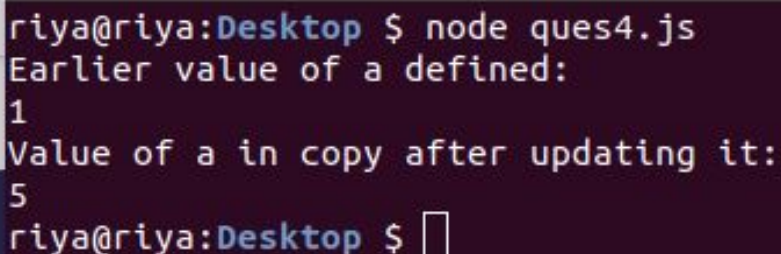
```
function areaOfCircle(r){  
  var pi = 3.14;  
  var area = pi*r*r;  
  console.log("Area of circle with radius "+r+" is: "+area);}
```



```
riya@riya:Desktop $ node ques3.js  
Area of circle with radius 4 is: 50.24  
riya@riya:Desktop $ node ques3.js  
Area of circle with radius 5.12 is: 82.313216000000001
```

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

```
let obj = {  
  a: 1,  
  b: 2,  
};  
let copy = obj;  
console.log("Earlier value of a defined:");  
console.log(obj.a);  
obj.a = 5;  
console.log("Value of a in copy after updating it:");  
console.log(copy.a);
```

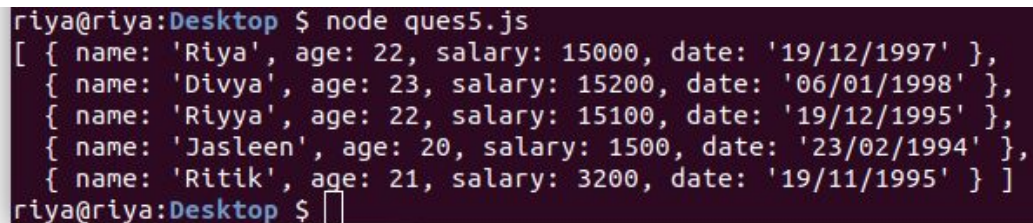


```
riya@riya:Desktop $ node ques4.js  
Earlier value of a defined:  
1  
Value of a in copy after updating it:  
5  
riya@riya:Desktop $
```

5. Create a list of objects of Employee with info as follow :

- **Name, age, salary ,DOB**

```
var employee = []
    employee[0]={name: 'Riya', age: 22, salary: 15000, date:
'19/12/1997' },
    employee[1]={ name: 'Divya', age: 23, salary: 15200, date:
'06/01/1998' },
    employee[2]={ name: 'Riyya', age: 22, salary: 15100, date:
'19/12/1995' },
    employee[3]={ name: 'Jasleen', age: 20, salary: 1500, date:
'23/02/1994' },
    employee[4]={ name: 'Ritik', age: 21, salary: 3200, date:
'19/11/1995' }
console.log(employee);
```



```
riya@riya:Desktop $ node ques5.js
[ { name: 'Riya', age: 22, salary: 15000, date: '19/12/1997' },
  { name: 'Divya', age: 23, salary: 15200, date: '06/01/1998' },
  { name: 'Riyya', age: 22, salary: 15100, date: '19/12/1995' },
  { name: 'Jasleen', age: 20, salary: 1500, date: '23/02/1994' },
  { name: 'Ritik', age: 21, salary: 3200, date: '19/11/1995' } ]
riya@riya:Desktop $
```

- **filter all employees with salary greater than 5000**

```
var employee = []
    employee[0]={name: 'Riya', age: 22, salary: 15000, date:'19/12/1997' },
    employee[1]={ name: 'Divya', age: 23, salary: 15200, date:
'06/01/1998' },
    employee[2]={ name: 'Riyya', age: 22, salary: 15100, date:      '19/12/1995' },
    employee[3]={ name: 'Jasleen', age: 20, salary: 1500, date:      '23/02/1994' },
    employee[4]={ name: 'Ritik', age: 21, salary: 3200, date:      '19/11/1995' }
console.log("Employees with salary greater Rs.5000");
for(var i=0; i<5; i++){
    if(employee[i].salary>5000){
        console.log(employee[i].name);}}
```

```
riya@riya:Desktop $ node ques5.js
Employees with salary greater Rs.5000
Riya
Divya
Riyya
riya@riya:Desktop $
```

- **group employee on the basis of their age**

```
var employee = []
    employee[0]={name: 'Riya', age: 22, salary: 15000, date:
'19/12/1997' },
    employee[1]={ name: 'Divya', age: 23, salary: 15200, date:
        '06/01/1998' },
    employee[2]={ name: 'Riyya', age: 22, salary: 15100, date:
'19/12/1995' },
    employee[3]={ name: 'Jasleen', age: 23, salary: 500, date:
'23/02/1994' },
    employee[4]={ name: 'Ritik', age: 21, salary: 200, date:
'19/11/1995' }

var age22=[];
var age23=[];
var ageother=[];
var i;
for (i=0; i<5; i++)
{
    if(employee[i].age == 22)
    {
        age22.push(employee[i].name);
        console.log("People with age 22");
        for(var j=0; j<i; j++)
        {
            console.log(age22[j]);
        }
    }

    else if(employee[i].age == 23)
    {
        age23.push(employee[i].name);
    }
}
```

```

        console.log("People with age 23");
        for(var k=0; k<i; k++)
        {
            console.log(age23[k]);
        }
    }
    else if(employee[i].age != 22 & employee[i].age != 23 )
    {
        ageother.push(employee[i].name);
        for(var l=0; l<i; l++)
        {
            console.log(ageother[l]);
        }
    }
}

```

```

People with age 22
Riya
Riyya
People with age 23
Divya
Jasleen
undefined
People with age other than 22 ans 23
Ritik
undefined
undefined
undefined
riya@riya:Desktop $ 

```

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

```

var employee = []
employee[0]={name: 'Riya', age: 22, salary: 15000, date:'19/12/1997' },
employee[1]={ name: 'Divya', age: 23, salary: 15200, date:'06/01/1998' },
employee[2]={ name: 'Riyya', age: 22, salary: 15100, date: '19/12/1995' },
employee[3]={ name: 'Jasleen', age: 24, salary: 500, date:'23/02/1994' },
employee[4]={ name: 'Ritik', age: 21, salary: 200, date:'19/11/1995' }

```

```
console.log("Employee with salary less than 1000 and age greater than 20: ");
var i;
for(i=0; i<5; i++){
    if(employee[i].salary<1000 & employee[i].age>20){
        console.log(employee[i]);
        employee[i].salary = 5*employee[i].salary;
        console.log("updated salary: ");
        console.log(employee[i].salary);}}
```

```
riya@riya:Desktop $ node ques5.js
Employee with salary less than 1000 and age greater than 20:
{ name: 'Jasleen', age: 24, salary: 500, date: '23/02/1994' }
updated salary:
2500
{ name: 'Ritik', age: 21, salary: 200, date: '19/11/1995' }
updated salary:
1000
```