Bai Tap Ve Ham

1.**Write a JavaScript program to list the properties of a JavaScript object**

```
Sample object:

    var student = {
        name : "David Rayy",
        sclass : "VI",
        rollno : 12
    };

Sample Output: name,sclass,rollno
```

2.**Write a JavaScript program to get the length of a JavaScript object**

```
Sample object :

    var student = {
        name : "David Rayy",
        sclass : "VI",
        rollno : 12
    };
```

3.**Write a JavaScript program to display the reading status (i.e. display book name, author name and reading status) of the following books**

```
var library = [
    {
        author: 'Bill Gates',
        title: 'The Road Ahead',
        readingStatus: true
    },
    {
        author: 'Steve Jobs',
        title: 'Walter Isaacson',
        readingStatus: true
    },
    {
        author: 'Suzanne Collins',
        title:  'Mockingjay: The Final Book of The Hunger Games',
        readingStatus: false
}];
```

4.**Write a JavaScript program to get the volume of a Cylinder with four decimal places using object classes**

Volume of a cylinder : $V = \pi r^2 h$ where r is the radius and h is the height of the cylinder.

5.**Write a JavaScript program which returns a subset of a string**

Sample Data: dog Expected Output: ["d", "do", "dog", "o", "og", "g"]

6.**Write a JavaScript program to create a Clock.**

Note: The output will come every second. Expected Console Output : "14:37:42" "14:37:43" "14:37:44" "14:37:45" "14:37:46" "14:37:47"

7. **Write a JavaScript program to calculate the area and perimeter of a circle.**

Note : Create two methods to calculate the area and perimeter. The radius of the circle will be supplied by the user.

8.**Write a JavaScript function to retrieve all the values of an object's properties**

9.**. Write a JavaScript function to get a copy of the object where the keys have become the values and the values the keys.**

10**Write a JavaScript function to check whether an object contains given property**

11**Write a JavaScript program to calculate the factorial of a number.**

In mathematics, the factorial of a non-negative integer n, denoted by n!, is the product of all positive integers less than or equal to n. For example, 5! = 5 x 4 x 3 x 2 x 1 = 120

12**Write a JavaScript program to get integers in the range (x, y) using recursion**

Example : range(2, 9) Expected Output : [3, 4, 5, 6, 7, 8]

13.**Tim hieu thuat toan selection sort** (Hieu ro)

14.**Tim hieu thuat toan merge sort** (Hieu ro)