

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

```
Sol: let student= { name : "David Rayy", sclass : "VI", rollno : 12 }
function property(object){
  for(item in object){
    console.log(item);
  }
}
property(student);
```

2. Write a JavaScript program to delete the rollno property from the following object. Also print the object before or after deleting the property. Sample object: `var student = { name : "David Rayy", sclass : "VI", rollno : 12 }`;

```
Sol:
for(item in student){
  console.log(item,student[item]);
}
delete student.rollno;
for(item in student){
  console.log(item,student[item]);
}
```

3. Write a JavaScript program to get the length of a JavaScript object. Sample object : `var student = { name : "David Rayy", sclass : "VI", rollno : 12 }`;

```
Sol:
student = { name : "David Rayy", sclass : "VI", rollno : 12 }
console.log(Object.keys(student).length);
```

4. 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 }];`

Sol:

```
let 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 }
];
for(let i=0;i<library.length;i++){
for(items in library[i]){
console.log(items+"-"+library[i][items]);
}
console.log();
}
```

5. 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. Try To Attempt : Difficult Level Increased

Sol:

```
function cylinder(radius,height){
let volume;
volume=Math.PI*radius*radius*height;
console.log("Volume of Cylinder is ",volume.toFixed(4));
}
cylinder(4,7);
```

6. Write a JavaScript program to sort an array of JavaScript objects. Sample Object : var library = [{ title: 'The Road Ahead', author: 'Bill Gates', libraryID: 1254 }, { title: 'Walter Isaacson', author: 'Steve Jobs', libraryID: 4264 }, { title: 'Mockingjay: The Final Book of The Hunger Games', author: 'Suzanne Collins', libraryID: 3245 }]; Expected Output: [[object Object] { author: "Walter Isaacson", libraryID: 4264, title: "Steve Jobs" }, [object Object] { author: "Suzanne Collins", libraryID: 3245, title: "Mockingjay: The Final Book of The Hunger Games" }, [object Object] { author: "The Road Ahead", libraryID: 1254, title: "Bill Gates" }]

Sol:

```

const library2 = [
  { title: 'The Road Ahead', author: 'Bill Gates', libraryID: 1254 },
  { title: 'Walter Isaacson', author: 'Steve Jobs', libraryID: 4264 },
  { title: 'Mockingjay: The Final Book of The Hunger Games', author: 'Suzanne
Collins', libraryID: 3245 }];
library2.sort((a,b)=>{
return b.libraryID-a.libraryID;
});
let lib=[];
let obj={};
for(let i=0;i<lib.length;;i++){
let keys=Object.keys(library2[i].sort());
for(index in keys){
let item=keys[index];
obj[item]=library[i][item];
}
lib.push(obj);
obj{};
}
for(let i=0;i<lib.length;i++){
for(items in lib[i]){
console.log(items+":-"lib[i][items]);
}
console.log();
}

```