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JavaScript Assignment 6

1. Perform the following operations to provide the implementation for a Rectangle class. The operations are:

1. Add an area() method to the Rectangle class.

2. Create a Square class that satisfies the following conditions:

- ○ It is a subclass of Rectangle.
- ○ It contains a constructor and no other methods.
- ○ It can use the Rectangle class' area method to print the area of a Square object.

//Program to Implement Rectangle Class and Square Child class

```
class Rectangle {  
    constructor(length, breadth = length) {  
        this.length = length;  
        this.breadth = breadth  
    }  
    getArea() {  
        return (Area is ${this.length * this.breadth});  
    }  
};
```

```
class Square extends Rectangle {  
    constructor(length, breadth = length) {  
        super(length, breadth);  
    }  
};
```

//driver Code

```
let rect = new Square(15);  
console.log(rect.getArea())
```

2. Write a javascript function `find_largest` to return the `nth` largest number in an array-

eg- given an array of integers- `[3,45,6,7,23,5,7,8]`

`find_largest(3)` will return third largest number from the above array - which is 8.

// Program to find nth largest number in an array

```
class nthLargest {
  constructor(arr) {
    this.arr = arr;
  }
  find_largest(n){
    let sorted =this.arr.sort(function(a,b) {
      return a-b;
    })
    let filtered = [...new Set(sorted)]
    console.log('Here is the list without duplicates and sorted in ascending order:
    [${filtered}])')
    return filtered[n-1];
  }
}
```

//driver Code

```
let obj = new nthLargest([3,45,6,7,23,5,7,8]);
```

```
console.log(obj.find_largest(3))
```

3. Write a JavaScript program which accept a number as input in the function parameter and insert dashes (-) between each two even numbers.

For example if you accept 025468 as the output should be 0-254-6-8.
computeDash(025468) -> 0-254-6-8.

// Program to insert dashes (-) between each two even numbers.

```
function insertDash(num) {  
  let numArr = num.toString();  
  let result = [numArr[0]];  
  
  for (let x = 1; x < numArr.length; x++) {  
    if (numArr[x - 1] % 2 === 0 && numArr[x] % 2 === 0) {  
      result.push('-', numArr[x]);  
    } else {  
      result.push(numArr[x]);  
    }  
  }  
  return (result.join(''));  
}
```

//driver Code

```
let output = insertDash(01246834686);  
console.log(output);
```