**Functional Programming**

Q.1

<!DOCTYPE html>

<html>

<head>

    <title>JSF Q1</title>

</head>

<body>

    <script>

        function square(x) {

            return (x \* x);

        }

        function double(x) {

            return (x \* 2);

        }

        function composedValue(square, double, x) {

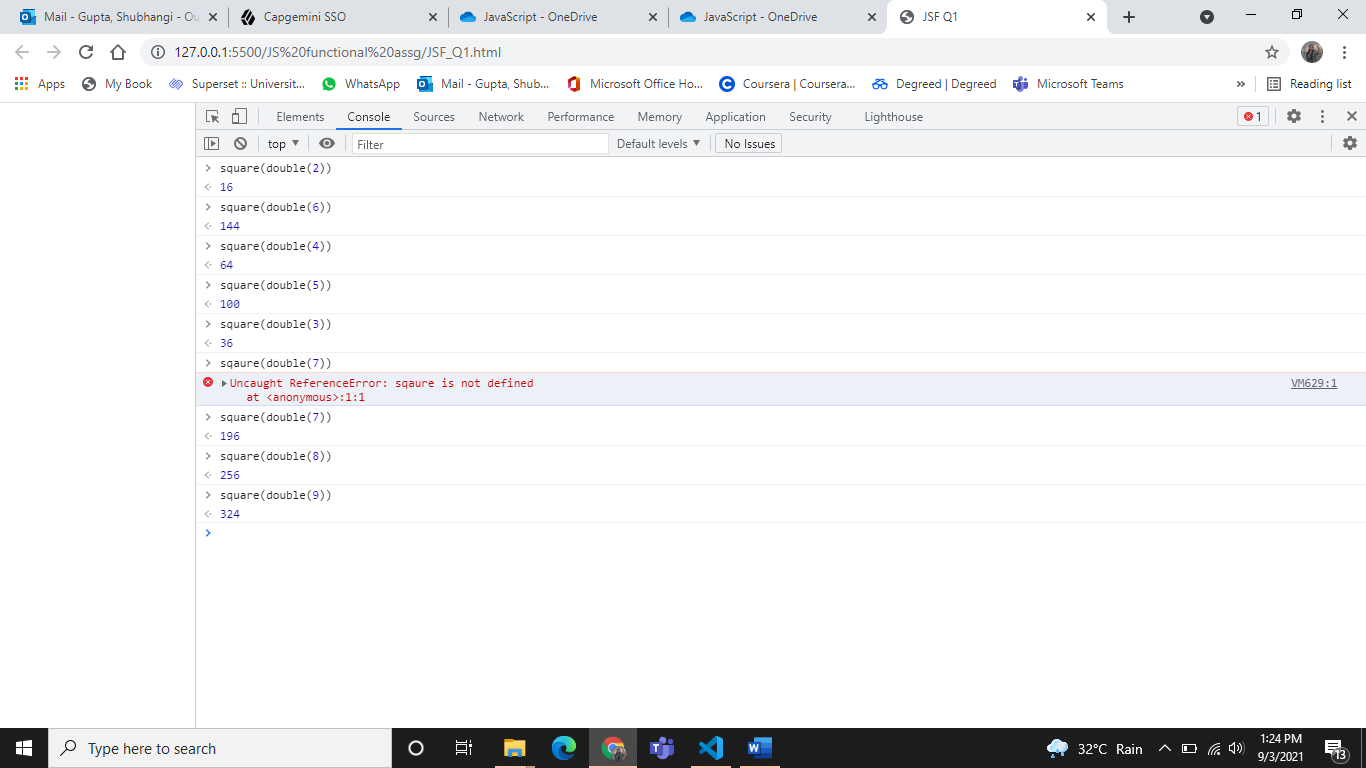
            return square(double(x));

        }

    </script>

</body>

</html>

Output: 

Q.2

<!DOCTYPE html>

<html>

<head>

    <title>JSF Q2</title>

</head>

<body>

    <script>

        function square(x) {

            return (x \* x);

        }

        function double(x) {

            return (x \* 2);

        }

        var f1 = console.log(square(double(5)))

        var f1 = console.log(square(double(10)))

        var f2 = console.log(double(square(5)))

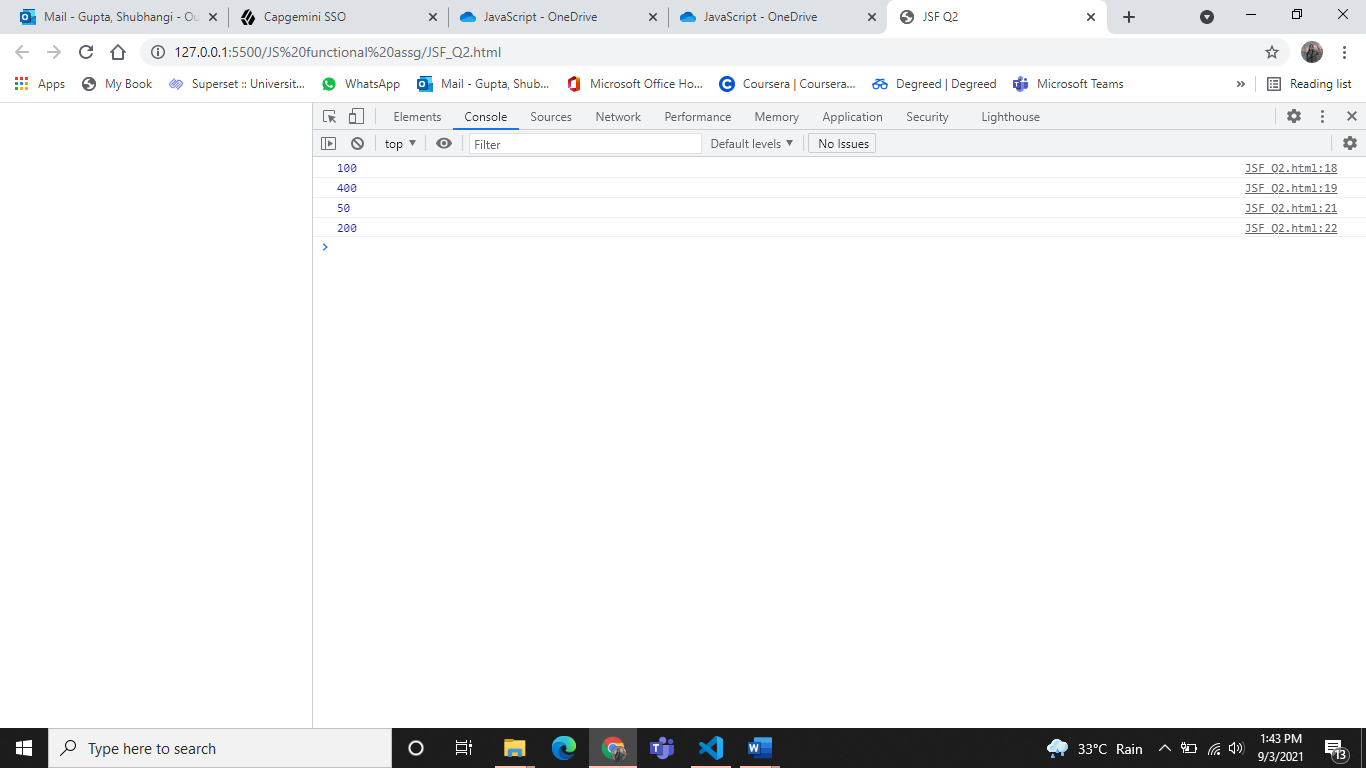
        var f2 = console.log(double(square(10)))

    </script>

</body>

</html>

Output:



Q.3

<!DOCTYPE html>

<html>

<head>

    <title>JSF Q3</title>

</head>

<body>

    <script>

        function isEven(num) {

            return (num % 2 == 0);

        }

        function find() {

            return array;

        }

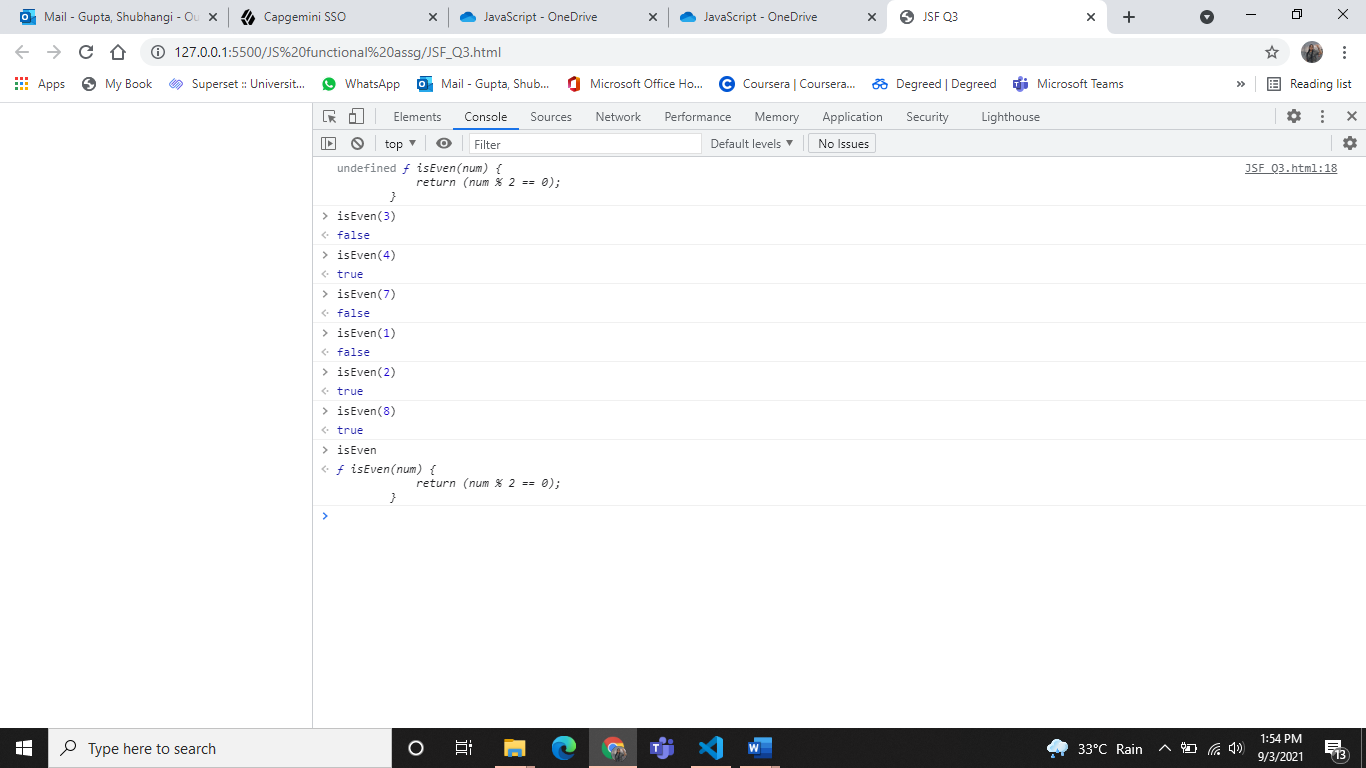
        console.log(find[1, 3, 5, 4, 2], isEven);

    </script>

</body>

</html>

Output:



Q.4

<!DOCTYPE html>

<html>

<head>

    <title>JSF Q4</title>

</head>

<body>

    <script>

        let arr1 = [1, 2, 3, 4, 5];

        let map1 = arr1.map(x => Math.pow(x, 2));

        console.log("Square of the array is: [" + map1 + "]");

        let arr2 = [1, 4, 9, 16, 25];

        let map2 = arr2.map(x => Math.sqrt(x, 2));

        console.log("Square root of the array is: [" + map2 + "]");

    </script>

</body>

</html>

Output:

