**LAB # 07**

**Advance Java Script II**

**Lab Task**

1. Write a javascript function that takes length, width, and height values of rectangle from user. The function should find the volume of rectangle using the function-currying.

CODE:

var length = prompt("Enter a number for the length of your rectangle.");

var width = prompt("Enter a number for the width of your rectangle.");

var height = prompt("Enter a number for the width of your rectangle.")

function volume(length, width, height) {

return length \* width \* height; }

document.writeln('The volume of your rectangle is ' + volume(length, width,height));

1. Create two functions “Profile” (outer function) and “greetingMsg” (inner function) that aims to implements the concept of Function-closure by generating an alert of greeting message with the help of user details provided in outer function.

CODE:

function Profile() {

var m\_name = 'my Name'; // name is a local variable created by init

function greetingMsg () { // displayName() is the inner function, a closure

alert(m\_name); // use variable declared in the parent function

}

greetingMsg();

}

init();

1. It's a general concept in mathematics where you combine two or more functions into a brand-new function. Write a javascript program to implement the given concept with the help of function-compose for the given function. **f(g(x))**

CODE:

// function composition of any number of functions

const compose = (...fns) => x => fns.reduceRight((y, f) => f(y), x);

const double = x => x \* 2

const square = x => x \* x

// function composition

var output\_final = compose(square, double)(2);

console.log(output\_final);

1. Write a javascript program that uses  filter() to create a filtered array that has all elements with values less than 10 removed.

CODE:

const words = ['spray', 'limit', 'elite', 'exuberant', 'destruction', 'present',’shazil’,’ahmed’,’Umer’,’sohail’];

const result = words.filter(word => word.length > 10);

console.log(result);

1. Creates an array consisting of only those elements that satisfy the condition checked by **isPositive()** function with the help of appropriate javascript advance loops concept.
2. Write a javascript program that implements the array.**map()** that aim to produces an array containing square roots of the numbers in the original array.
3. Create a class named 'Member' having the members: Name, Age, Salary. It also has a method named 'printSalary' which prints the salary of the members. Create child class 'Employee' that inherits the 'Member' class. The 'Employee' classes have data member 'department'. Now, assign name, age and salary to an employee by making an object of child class and print the same.
4. Write a javascript program to implement the concept of nullish coalesing operator by using the below object properties.

const response = {  
data: {  
name: 'Ronaldo’,  
occupation: null,  
lies: 0  
}  
}