Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

\_\_\_07\_\_\_

LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| **01** | 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. |
| **02** | 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. |
| **03** | 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))** |
| **04** | Write a javascript program that uses  filter() to create a filtered array that has all elements with values less than 10 removed. |
| 05 | 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. |

Submitted On

14-12-2023

(Date: DD/MM/YY)

**Task 01:** 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.

**Solution:**

function calVolume(length){

return (width)=>{

return (height )=>{

return length\*width\*height; }}}

console.log("The Volume of Rectangle is "+calVolume(10)(20)(30))

**Output:**



**Task 02:** 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.

**Solution:**

function Profile(){

var outerProfile="Hello Shoaib";

function GreetingMsg(){

alert(outerProfile)}

return GreetingMsg;}

var InnerGreetingMsg=Profile();

InnerGreetingMsg()

**Output:**

A white background with a black border

Description automatically generated

**Task 03:** 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))**

**Solution:**

const compose = (f, g) => (a) => f(g(a));

const g = (x) => x + 2;

const f = (x) => x / 2;

const fg = compose(f, g);

console.log("The Answer is "+fg(15));

**Output:**

A white rectangular object with blue lines

Description automatically generated

**Task 04:** Write a javascript program that uses  filter() to create a filtered array that has all elements with values less than 10 removed.

**Solution:**

let arrayNum=[10,20,30,40,50]

arrayNum.filter((value)=>{

console.log(value/10)

})

**Output:**

A white paper with black numbers

Description automatically generated

**Task 05:** 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.

**Solution:**

let array1=[1,2,-4,-5,25,-9,10];

let isPositive= array1.filter((value)=>{

return value>0

})

console.log(isPositive);

**Output:**

A screenshot of a computer code

Description automatically generated