**University of Sargodha**

**Mandi Bahauddin campus**

**LAB Sheet #1**



**C Lab Report Submitted By:**

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**Submitted To:**

**Department of CS & IT University of Sargodha M.B.Din**

Lab Date: Marks & Signature

Submission Date:

Objective(s):

To be familiar with syntax and structure of C-programming. To learn problem solving techniques using C

Title:

Write a program to print hello word on screen.

Problem Analysis:

Use library **stdio.h** and give the command of printing somethings i.e **printf**

Algorithm:

* Open an compiler
* Include libaray i.e stdio.h
* Start program
* Enter the command
* close

Code



Output (Compilation, Debugging & Testing



Title:

Program to add two numbers (5&7) and display its Sum

Problem Analysis:

The problem is sum two number i.e **5 and 7** its parameter are integer type

The out parameter is identified as **sum** (integer type)

Both number is added and output display

Algorithm:

* Start
* Define variables: a(int), b(int), sum(int)
* Assign value to variables: a = 5, b=7
* Added both num as: sum = a+b
* Display the Sum
* Stop

Code



Output (Compilation, Debugging & Testing)



Title:

Write a program to multiply two numbers (10&8) and display its product.

Problem Analysis:

The problem is multiply two number i.e 10 and 8 its parameter are integer type

The out parameter is identified as product (integer type)

Both number is multiply and output display

Algorithm:

* Start
* Define variables: a(int), b(int), multi(int)
* Assign value to variables: a = 10, b=8
* Multiply both num as: multi = a\*b
* Display the Sum
* Stop

Code:



Output (Compilation, Debugging & Testing)



Title:

Write a program to calculate area of a circle having its radius (r=5).

Problem Analysis:

Find the area, first we define variable (float type) as radius. The output. The output of the program is to display the area hence the output parameter is identified as area (float type).

The area of the cricle is the multiplication of its radius square and pi(constant i.e 3.14) hence the mathematical formula to calculate area is:

Area = Pi(3.14)\* radius(sq).

Algorithm:

* Start
* Define variable: Radius(float),
* Assign value to variables: Radius = 5
* Calculate the area as: area = 3.14\*radius\*radius
* Display the area (area)
* Stop

Code



Output (Compilation, Debugging & Testing)



Title:

Write a program to calculate area of ellipsis having **minor axis = 4** and **major axis = 6**

Problem Analysis:

Find the area , first we define variables (float type) as major & minor. The output. The output of the program is to display the area hence the output parameter is identified as area (float type).

The area of the ellipsis is the multiplication of its major and minor and pi(constant i.e 3.14)

Algorithm:

* Start
* Define variable: minor(float), major(float),
* Assign value to variables: minor= 4 , major= 6
* Calculate the ellipsis as: area = 3.14\*major\*minor
* Display the area (area)
* Stop

Code



Output (Compilation, Debugging & Testing)



Title:

Write a program to calculate simple interest to given **p=4000 t=2 r=5.5** (I=p\*t\*r/100)

Algorithm:

* Start
* Define variables: p(int) t(int) r(float)
* Assign value to variables: p= 4000 , t= 2, r=5.5
* Calculate the Interest as: I = (p\*r\*t)/100
* Display the interest (I)
* Stop

Code



Output (Compilation, Debugging & Testing)

