

**Lab Assignment 1****Basic Elements on C++ and Input/Output**

1. Write C++ statements that read two values i.e. num1 and num2. Multiplies the value of num1 by 2, adds the value of num2, and then stores the result in newNum. Then write a C++ statement that outputs the value of newNum.
2. Write a program that prompts the user to input the length and width of a rectangle and then prints the rectangle's area and perimeter. (Assume that the length and the width are decimal numbers.)
3. Write C++ statements that print the sum, difference, product, quotient, and remainder of two integers that are input interactively.
4. Write C++ statements that read four inputs interactively i.e. a name as a string, a pay rate, work hour as decimal numbers, and tax deduction as integer number. Calculate a net salary by multiplying the pay rate and the work hour and subtract from it tax deduction on whole salary. Assume that the salary is a decimal number. The program should be able to produce the following output, for example, if the values of the name, pay rate, work hour, and tax deduction are "Ahmad", 12.50, 45.50, and 4% respectively, then the output is:

Name: Ahmad  
Pay rate: RM12.50  
Work hour: 45.50 hours  
Tax Deduction: 4%  
Net Salary: RM 546.00

5. Write a C++ statement that prompts the user to input a length and weight expressed in inches and pounds, respectively. Convert the length in inches to centimeter and weight in pounds to kilograms using the following formula:

1 inch = 2.54 centimeters  
1 pound = 0.45359 kilograms

Then write a C++ statement to instruct the user to key in input and then output the values in centimeters and kilograms.

For example:  
Please enter the length in inch: 20  
Please enter the weight in pound: 40  
The length in centimeters = 50.8  
The weight in kilograms = 18.1436

6. Write a program that prompts the user to input a weekly number of working hours for a period of a month. Then calculate and display the monthly salary based on the following formula:

Salary in week 1 = RM20 \* number of working hours in week 1

Salary in week 2 = RM30 \* number of working hours in week 2

Salary in week 3 = RM50.50 \* number of working hours in week 3

Salary in week 4 = RM60.95 \* number of working hours in week 4

Monthly salary = salary in week 1 + salary in week 2 + salary in week 3 + salary in week4.