

P r o g r a m m i n g F u n d a m e n t a l s

Lab 04**Marks 100****Instructions**

Work on this lab individually.

You can use your books, notes, handouts etc. but you are not allowed to borrow anything from your peer student.

Objectives

Today's lab will help you to build the understanding of input, variable, Simple calculation statements in C++.

Submission

- Put all the files (*.cpp) of your solution in a zipped folder labeled with your **roll number**.
- Send your lab submission to hassankhan@pucit.edu.pk by **Saturday, June 05, 2021 11:59 PM**.
- The **subject** of the email must be **Lab04** only.

In case of any violation(s), your lab will not be accepted/graded.

What you have to do

Program the following tasks in your DEVCP and then compile and execute them. The name of your files will be according to the task given in this lab.

Task 1**[25]**

Suppose an employee gets paid every **month** and earns **2000.00** each pay period. In a year the employee gets paid **12** times. Write a program that defines the following variables:

payAmount This variable will hold the amount of pay the employee earns each pay period.

payPeriods This variable will hold the number of pay periods in a year.

annualPay This variable will hold the employee's total annual pay, which will be calculated.

The program should calculate the employee's **total annual pay** by multiplying the employee's pay amount by the **number of pay periods** in a year, and store the result in the **annualPay** variable. Display the **total annual pay** on the screen.

Task 2**[25]**

A soft drink company recently surveyed **12,467** of its customers and found that approximately **14 percent** of those surveyed purchase **one or more energy drinks per week** of those customers who purchase energy drinks, approximately **64 percent** of them prefer **citrus flavored** energy drinks. Write a program that displays the following:

The approximate number of customers in the survey who purchase one or more energy drinks per week.

The approximate number of customers in the survey who prefer citrus flavored energy drinks.

Task 3**[25]**

There are **three seating** categories at a stadium. For a softball game, **Class A** seats cost **15**, **Class B** seats cost **12**, and **Class C** seats cost **9**. Write a program that asks **how many tickets for each class of seats were sold**, then displays the **amount of income** generated from ticket sales.

Task 4**[25]**

The Yahoo Widget Company manufactures widgets that **weigh 9.2 pounds** each. Write a program that **calculates** how many widgets are stacked on a pallet, based on the **total weight** of the pallet. The program should ask the user how much the pallet weighs by itself and with the widgets stacked on it. It should then **calculate and display** the number of widgets stacked on the pallet.

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