Object Oriented Programming Lab

Lab 01 **Marks 05**

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.

Marking Criteria

Show your work to the instructor before leaving the lab to get some or full credit.

What you must do

Program the following tasks in your C++ compiler and then compile and execute them.

Task 01

Suppose an employee gets paid every **two weeks** and earns **1700.00** each pay period. In a year the employee gets paid **26** 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 02

A software company sells a package that retails for **99**. Quantity discounts are given according to the following table.

Quantity	**Discount**
10 – 19	20%
20 – 49	30%
50 – 99	40%
100 or more	50%

Write a program that asks for the **number of units sold** (must be greater than zero) and computes the **total cost of the purchase**.

Task 03

Assuming the ocean's level is currently **rising** at about **1.5 millimeters per year**; write a program that displays a table showing the **number of millimeters** that the ocean will have **risen each year** for the **next N years** where **N** is taken from the user.

Sample Execution

Sample Execution 1		**Sample Execution 2**	
Number of years? **3**		Number of years? **5**	
Year	**Level**	**Year**	**Level**
1	1.5	1	1.5
2	3.0	2	3.0
3	4.5	3	4.5
		4	6.0
		5	6.5

Task 04

Write a program that inputs **sLimit** (staring limit) and **eLimit** (ending limit) from user, and **display** the **sum** of only those numbers exist between range which are **divisible** by **2** and **3** and **5**, with both limits included

Sample Executions

Sample Execution 1	**Sample Execution 2**
Enter starting limit: **3** Enter ending limit: **65** The sum is: **90**	Enter starting limit: **28** Enter ending limit: **95** The sum is: **180**

☺ ☺ ☺ **BEST OF LUCK** ☺ ☺ ☺