

Prelim Activity 2

Creating Java Programs – Program Analysis

TASK GUIDE

Due Date:

Objective: Create programs that illustrates basic program flow analysis showing real life scenarios.

Requirements:

Write a Java program that will be used at the check-out counter of Aling Nena's Sari-Sari Store with the following assumptions.

1. Aling Nena's customers always buy only one type of product, but may buy one or more pieces of the said product. For example, a customer may buy a dozen eggs.
2. Depending on the customer, Aling Nena may decide to give the customer a discount, expressed as an integer value from 1 to 100, which indicates the percentage deducted from the total amount of the customer's purchase. For example, assuming that eggs cost P5.00 a piece, a dozen eggs would cost a total of P60.00, and if the customer is then given a 10 percent discount, then the customer will have to pay only P54.00 for one dozen of eggs. Customers who are not entitled to discounts are given zero (0) percent discount. Aling Nena's customers always pay in cash, and the cash amount tendered is always greater than or equal to the total purchase amount. Your program must calculate the change given to the customer.
3. Shown below are sample outputs when the program is executed:

Sample Output 1:

Welcome to Aling Nena's Store
Please input the following information:
Product name: **eggs**
Quantity: **12**
Unit Price: **5.00**
Discount: **10**
Cash Tendered: **100.00**

Sales Summary
Total Purchase Amount: 60.00
Total Discount: 6.00
Amount To Be Paid: 54.00
Change: 46.00
Thank you for your purchase!

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Sample Output 2:

Welcome to Aling Nena's Store
Please input the following information:
Product name: **milk**
Quantity: **3**
Unit Price: **18.75**
Discount: **0**
Cash Tendered: **60.00**

Sales Summary
Total Purchase Amount: 56.25
Total Discount: 0.00
Amount To Be Paid: 56.25
Change: 3.75
Thank you for your purchase!

Note: User inputs are shown in red text.

Deliverable:

- Filename: PreAct2LastnameFirstname
- The java file should include comments indicating student name, date and activity name as header at the beginning of the java program.
- The java file should include comments providing the algorithm for the required program.

Rubric and Criteria:

Criteria	10 points	8 points	5 points	3 points	0 point
Program Correctness: Algorithm and logic	The program generates the perfect output. With complete header and algorithm.	The program generates an output with a minor mistake	The program generates a partially correct output	The output of the program is wrong	No submission