

DiscountCalculator Program

Write a program to ask the user to enter the name of the item, price of the item and the quantity.

1. Format output to have two decimal places.

2. calculate the total based on:

- quantity less than 10, 0% no discount
- between 10 and 20, 20% discount
- between 21 and 50, 40% discount
- Between 51 and 100, 60% discount
- Greater than 100, 70% 3.

create a function that returns the discount as a (double) based on the quantity.

Sample input Please enter the name, the price of the item and the quantity:

Apple

10

20

Sample output:

Name = Apple

Price = \$10.00

Quantity = 20

Discount percentage = 20.0%

Discount amount = \$40.00

Total = \$160.00

Explanation:

1. **getDiscountPercentage(int quantity):**

- This method determines the discount based on the number of items purchased. It returns the discount percentage as a double.

2. **User Input:**

- The program prompts the user to enter the item's name, price, and quantity using the Scanner class.

3. **Calculations:**

- **Discount percentage** is calculated using the getDiscountPercentage method.
- **Discount amount** is calculated as $(\text{discountPercentage} / 100) * \text{price} * \text{quantity}$.

- **Total price** is calculated as $\text{price} * \text{quantity} - \text{discountAmount}$.

4. **Formatted Output:**

- The results are printed using `System.out.printf()` to ensure two decimal places for price, discount, and total.