

## Task 1

Here is a catalogue with 3 products.

Product Name : Price

Product A : \$20

Product B : \$40

Product C : \$50

### Discount Rules:

- "flat\_10\_discount": If cart total exceeds \$200, apply a flat \$10 discount on the cart total.
- "bulk\_5\_discount": If the quantity of any single product exceeds 10 units, apply a 5% discount on that item's total price.
- "bulk\_10\_discount": If total quantity exceeds 20 units, apply a 10% discount on the cart total.
- "tiered\_50\_discount": If total quantity exceeds 30 units & any single product quantity greater than 15, then apply a 50% discount on products which are above 15 quantity. The first 15 quantities have the original price and units above 15 will get a 50% discount.

Note: Only one rule can be applied per purchase. If multiple discounts are applicable, the program calculates the discount amount for each rule and applies the most beneficial one for customer.

### Fees:

- Gift wrap fee: \$1 per unit.
- Shipping fee: 10 units can be packed in one package, and the shipping fee for each package is \$5.

### Program

The program will ask the quantity of each product. The program will also ask if that product is wrapped as a gift?

Then the program will show / output below details.

- The product name, quantity & total amount of that product.
- Subtotal
- The discount name applied & the discount amount.
- The shipping fee & the gift wrap fee.
- Total

Please solve the problem using 2 programming languages you know well (preferably Python, JavaScript, or PHP). You don't need to create a web application or don't need to use any database for this.

**Do not use any frameworks or libraries. Push the code in any public code repo (GitHub, GitLab etc) & share the repo link with us. In the code repo, add the steps / document about how to use the program. The program should accept the given parameters and provide the solution as output. AI generated code will be disqualified.**

## **Task 2**

**Do share your thoughts on the following**

- Why do you like to join as a Software developer?
- List top 3 softwares / tools that inspire you. Why do these tools inspire you?
- List top 3 organisations you like to join in your career & why you like these organisations.
- How you position yourself in this industry after 2 years.
- List 3 projects / products you have built or have planned to build in the upcoming year, also explain your role in the same.