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.