**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

1. **Java**

**Output:**

Enter the quantity for Product A : 45

Enter the quantity for Product B : 17

Enter the quantity for Product C : 19

You want to wrap your product as gift or not? (Press Yes or No) no

Product Name Quantity Total Amount of Product

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Product A 45 900

Product B 17 680

Product C 19 950

-----------------------------------------------------------

Total Quantity 81

Sub Total $2530

Coupon - 10% -$253.0

Shipping Fees $45

Wrapping Fees $0

Total $2322.0

**Steps to use Program:**

1. Open CMD
2. Navigate to the path where your files are located
3. Use the below command to compile the program

**javac ShoppingCart.java**

1. Use the below command to execute the program

**java ShoppingCart**

**Required Softwares**

1. Any text editor - Notepad, SublimeText, etc.
2. jdk
3. **Python**

**Output:**

Enter the quantity for Product A : 12

Enter the quantity for Product B : 17

Enter the quantity for Product C : 19

You want to wrap your product as gift or not? (Press Yes or No) yes

How many units you have to wrap? 5

Product Name Quantity Total Amount of Product

-----------------------------------------------------------

Product A 12 240

Product B 17 680

Product C 19 950

-----------------------------------------------------------

Total Quantity 48

Sub Total $1870

Coupon - 10% -$187.0

Shipping Fees $25

Wrapping Fees $5

Total $1713.0

**Steps to use program**

1. Open Jupyter Notebook
2. Paste the code in cel
3. Press **Shift + Enter** or Use Run symbol to execute the program

**Required Softwares**

1. Python
2. Jupyter Notebook

**Task 2**

1. Why do you like to join as a Software developer?

I want to join as a software developer because I am a creative person and I personally love designing and implementing something new. The role of software developer encourages me to develop my creativity and design skills. As a software developer, you can improve your thinking capability and develop new skills, and that is all I want to achieve.

1. List top 3 softwares / tools that inspire you. Why do these tools inspire you?

There are many tools that are good for software development, inspire us to work with them, and also create interest while working. I personally like Github, Bootstrap, and Visual Studio Code.

1) Github  
Github is a very good cloud community software where you can share your thoughts without hesitating and you can also access others' code for guidance. Through github, many difficult problems can get quick solutions. Best of all, it is a cloud-based tool. That means it is a very good invention in the IT world.

2) Bootstrap  
I am very interested in frontend design. I like to play with colors and elements and create some creativity. Bootstrap makes the process much easier as it is a front-end development tool. Using bootstrap classes, we can design very responsive front-ends without lengthy codes.

3) Visual Studio Code  
VS Code is a text editor and a very good developer tool for Angular, Python, and many more languages. The tools are very user-friendly, and every file and folder is well managed.

1. List top 3 organisations you like to join in your career & why you like these organisations.

There are many organisations that inspire me and that I want to join in my career. But below are the top organizations I want to join because of their reputation, work-life balance, and career development.

1) Google

Google is a top-leading IT organisation, and most people dream of working for Google. The best thing that attracts me to Google is an Indian person. Sundar Pichai started the organisation and put the company at the top of the list. I also want to contribute to our nation by joining Google.

2) Infosys

Infosys founder, Narayan Murthy, inspires me a lot. In an article I read about him, they faced a lot of difficulties in their journey, but they still made Infosys the first Indian company to be listed on an American stock exchange.

3) Microsoft

Microsoft is also a great organisation on the top list. Microsoft always focuses on creativity, innovation, and strong leadership, and considering all these factors, it always provides good and user-oriented products. Their trust in every employee is very pure and strong.

1. How you position yourself in this industry after 2 years.

I worked in an IT organization before these, and after collecting reviews from my manager and head of department, I understand my strengths and weaknesses. On the basis of that, I see myself in two years in a good position. Developing my skills and using them as necessary for the organization Taking on new responsibilities and completing them as per the expectations. Gaining expertise. I also got married, so I combined my career and family responsibilities successfully without compromising either one at the same time. Simply, I view myself in the next two years as a strong woman who will balance her official work with her family.

1. List 3 projects / products you have built or have planned to build in the upcoming year, also explain your role in the same.

1) End Life Vehicle (DigiELV)

I dealt with the production issues of ELV. As per the client's requirements, I redesigned some screens of ELV. Created documentation on configuration processes and installations of various tools for the future.

2) Registered Vehicle Scrapping Facility (RVSF)

In RVSF, screens such as RVSF Master, Po & PRN, GRR & GRN were designed by me. And The data population from the database to the user interface screens was done on different screens. Worked on Dashboard UI and its responsiveness. I was a part of front-end design, back-end handling, and application deployment.

3) Pathology Lab Software

Pathology Lab Software was a sponsored standalone application. I used technologies like Core Java (swing), MySql for software development. A special feature of this software was the creation of test reports for patients. The reports were created using Jasper Report in Java. Worked on front-end designing and report generation.