**Important Instruction:**

1. Please read the document thoroughly before you code.
2. Import the given skeleton code into your Eclipse.
3. Refer/Use the solution file only when you are not able to complete the case study within given time.

A leading retail shop is looking out solution providers to build an IT system which can help them to run their business online. The company is wants you to design Class files and methods as per their requirements.

**Skeleton File for Development:**

Import the below attached skeleton code into your eclipse project and implement the required functionalities



**Requirements:**

You are required to develop an App which can provide the following service.

**API 1 (Requirement 1):** WriteJava class OrderDetails with member variables to hold Item Name, Cost and Quantity. Define parameterized constructor, getter and setter methods.

Write method printMessage to take quantity as input. Use Switch construct to check the value of quantity and display respective statement given below using logger

|  |  |
| --- | --- |
| **quantity** | **Statement** |
| 1 | You have selected one item. |
| 2 | You have selected two items. |
| default | You have not selected any item. |

**API 2 (Requirement 2):** Design another class EShopAddToCart.java. Create method **calculateSum** to calculate total sum of purchase Amount based on below formula.

Total Purchase Amount = sum of cost (itemCost \* quantity) from each object. Each row below correspond to one object.

|  |  |  |
| --- | --- | --- |
| **itemName** | **itemCost** | **Quantity** |
| Book | 200 | 3 |
| Watch | 1000 | 2 |

Total Purchase Amount = (200 \* 3) + (1000\*2)= 2600.

Use for loop to traverse through array of an object and calculate Total Purchase Amount.

**API 3 (Requirement 3):** Define method calculateDiscount to calculate discount based on below formula. Use if-else construct to implement this.

|  |  |
| --- | --- |
| **Total Purchase Amount (PA)** | **Discount** |
| PA < 1000 | 10% |
| 1000 < = PA < 10000 | 20% |
| PA > 10000 | 30% |

**Ex. If PA= 5000 then discount = 5000 \* 20 /100 = 1000**

## Technical Specifications:

|  |  |  |  |
| --- | --- | --- | --- |
| **ClassName** | **Method Name** | **Input Parameters** | **Output Parameters** |
| OrderDetails | printMessage | int quantity | -- |
| EShopAddToCart | calculateSum | OrderDetails []- Array of OrderDetails objects | double totalPurchaseAmount |
| EShopAddToCart | calculateDiscount | double totalPurchaseAmount | float discount |

**Note: Ensure that all the Java Coding Standards are followed.**