Programming Exam 2

Date/Time: 2024.03.19 08:10 – 09:00
(程式檔命名學號_quiz2.py，上傳至 Moodle PE2 上傳區)

Problem: Shopping Discount Calculator

A certain shopping website has different discount promotions. You need to calculate the final amount payable based on the user's shopping amount and membership level using Python's if, elif, else statements and string manipulation. Below are the rules for the discount promotions:

Members are divided into two levels: Regular and Gold.

- Regular Members: 10% discount for purchases over 1000; 15% discount for purchases over 2000; 20% discount for purchases over 3000.
- Gold Members: 15% discount for purchases over 1000; 20% discount for purchases over 2000; 25% discount for purchases over 3000.

Requirements:

(1) The user inputs the shopping amount and membership level (input a string: "Regular" or "Gold"), and output "Invalid member level" if neither "Regular" nor "Gold".

(2) Calculate the discounted amount based on the user's input amount and membership level.

(3) Output the membership level, and the final amount payable in one line.

Sample Input/Output (以下是你程式執行後須印出的結果)

```
c:\workspace>python pe2.py
Enter the shopping amount: 500
Enter the membership level (Regular or Gold): Regular
Regular $500.0

c:\workspace>python pe2.py
Enter the shopping amount: 5678
Enter the membership level (Regular or Gold): Regular
Regular $4542.400000000001

c:\workspace>python pe2.py
Enter the shopping amount: 2537
Enter the membership level (Regular or Gold): Gold
Gold $2029.6000000000001

c:\workspace>python pe2.py
Enter the shopping amount: 999
Enter the membership level (Regular or Gold): Platinum
Invalid membership level. Please enter 'Regular' or 'Gold'.

c:\workspace>
```

(繳交是交 pe2.py 檔，不是交截圖)

Note: You need to write comments (註解) for each part in your code.