**Trellix**

Instructions:

1. For all programing related questions:
   1. Write an algorithm outlining your approach.
   2. Follow clean coding guidelines (preferably PEP 8 - Python)
   3. Do not use inbuilt Python modules eg: sort, sum, random etc.
2. For all test case documentation questions:
   1. Document exhaustive test cases

Q1.  Write a program to determine how much discount a customer can get based on the below conditions:

A customer gets the following discounts based on the respective criteria:

1. 15 % on first purchase at the store.
2. 10 % if he/she has a membership card
3. 5% if senior citizen
4. 10 % on coupons

Note:

1. Only 2 discounts can be clubbed together, any 2 that give the highest discount
2. New customers cannot redeem coupons or get membership card discount

Sample output:

Eg 1: Customer is senior citizen and has a membership card  
Output: 15%

Eg 2: Customer is senior citizen and has both coupon and membership card  
Output: 20%

Q2. Create a detailed test case for the following scenario covering ‘[False Negative’ and ‘False Positive’](https://testfully.io/blog/false-positive-false-negative/#:~:text=In%20the%20context%20of%20automated%20software%20testing%2C%20a%20False%20Negative,bug%20when%20there%20is%20one.) cases using the following format:

“A user cannot create or delete a file of type ‘txt’ and ‘bat’ in C:\Windows\test\_file”

|  |  |  |
| --- | --- | --- |
| TestCase ID | Test Case Description | Expected Result |

Q3. Create a Multilevel dictionary by reading the provided logfile (PFA) and output the dictionary as {"Pattern1":{"line1":"Services","line2":"0001","line3":{"include":"BFE"},"line4":{"Include":"1\*1"},"line5":"0","line7":{"Include":"2\*2"},"line8":{"services":["stop","pause","delete","startup"]}}, "Pattern2":{"line1":"Registry"......}, "Pattern3":{"line1":"Files"......} }