

# Discount Example

## Boundary Value Testing

### Problem Descriptions:

There are always some discounts on the website, and for different members, the discounts are not the same. Member status can be: Non-Member(N), Regular-Member(R) and Gold-Member(G), and the value of product can be represented as (V). Following is the different discount for different members:

#### Non-Member(N):

| <u>product value</u> | <u>discount</u> |
|----------------------|-----------------|
| 0 and above          | 0               |

#### Regular-Member(R):

| <u>product value</u> | <u>discount</u> |
|----------------------|-----------------|
| 0 - \$1k             | 5%              |
| \$1k                 | 5%              |
| \$1k - \$5k          | 10%             |
| \$5                  | 10%             |
| \$5k and above       | 15%             |

#### Gold-Member(G):

| <u>product value</u> | <u>discount</u> |
|----------------------|-----------------|
| 0 - \$1k             | 10%             |
| \$1k                 | 10%             |
| \$1k - \$5k          | 15%             |
| \$5k                 | 15%             |
| \$5k - \$10k         | 20%             |
| \$10k                | 20%             |
| \$10k and above      | 25%             |

For example, if the input is: (G, \$20k), the calculation should be:

Final amount:  $\$20k * (1 - 25\%) = \$15k$

Design test cases to cover all boundaries for this system. Some invalid test cases must also be designed. Note: a test case should contain both input and expected output, i.e., ((Member\_status, product\_value), Final\_amount)