Price my food

In Riyadh, people enjoy gathering and eating outdoors. During the weekdays, restaurants are almost fully occupied either in the afternoon (12-2 pm) or late evening (8 pm-12 am). However, the number of incoming parties and their size are unknown. So, when a restaurant reaches its maximum capacity (MC), it places incoming parties on wait until a proper table becomes available. In this scenario, both restaurant owners and visitors lose money and time.

You are asked to develop a program to create an intelligent food menu pricing algorithm to solve this problem for restaurant owners. This algorithm will take maximum capacity (MC), current customers (CC), staff shortage (SS), and the original menu items information as input. Based on some conditions, menu items prices will vary from one customer to another.

Here are the pricing conditions: The food items in a menu can be categorized into four types:

- Famous (F): items that customers always order.
- Regular (R): items that customers frequently order.
- Limited (L): items that customers rarely order.

If restaurant busyness is or below 50% then

- Famous items are priced at their base price.
- Regular items are priced with a discount of 20% of their base price.
- Limited items are priced with a discount of 50% of their base price.

If restaurant busyness is more than 50% then

- Famous items are priced with an increase relative to the restaurant's busyness. For example, if the restaurant is 75% full, all famous items are increased by 75% of the base price.
- Regular items are priced with an increase of 25% of the base price.
- Limited items are priced at their base price.

The busyness is a value computed by dividing Current Customers by the Max Customers in the restaurant (CC/MC). It is given as a percentage (Integer).

The menu items are listed in this format:

```
Cheeseburger 40 F
Sandwich 80 L
Cheesecake 70 F
Pizza 70 R
Falafel 60 R
Eggroll 35 F
Burrito 90 F
```

Where each menu item name is followed by its Price, and Category (F, R, L)

This new system of pricing help restaurants to make up for the losses of heavy-traffic hours and attract customers to plan their visits during the low-traffic hours.

Your program reads the number of current customers (CC), Max capacity (CC) to determine new prices for the menu items.

Input Format

The program reads two integer values MC and CC.

Constraints

CC <= MC

Output Format

List of items with the new menu price. All values are given in Integers.

Sample Input 0

```
10
30
```

Sample Output 0

```
40
40
70
56
48
35
90
```

Explanation 0

CC is 10, MC is 30. Busyness is 10/30 which is <50. So the menu items prices would be Cheeseburger 40 Sandwich 40 Cheesecake 40 Pizza 56 Falafel 48 Eggroll 40 Burrito 40

Sample Input 1

```
30
40
```

Sample Output 1

```
70
80
122
87
75
61
157
```

Explanation 1

CC is 30, MC is 40, Busyness is 75% Cheeseburger 70 Sandwich 80 Cheesecake 122.5 Pizza 87.5 Falafel 75 Eggroll 61.25 Burrito 157.5

As we only keep the Integer values, the halalas are knocked off.

Java 7

```
import java.io.*;
import java.util.*;
import java.text.*;
import java.math.*;
import java.util.regex.*;

public class Solution {

    public static void main(String[] args) {
        /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. */
    }
}
```

Line: 1 Col: 1

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