Java question:

Grocery Receipt bill:

Extend the abstract class GroceryReceiptBase from the given code and implement the calculate function.
The output should print the list of fruits, the quantity purchased and the total price.
The total price may have a discount for that particular fruit as well. The example tables are given below.

BoughtItems(May have repeating fruits):

Fruit	**Count**
Orange	1
Orange	1
Banana	1
Apple	1

Prices:

Fruit	**Price**
Orange	5.0
Banana	20.00
Apple	35.00

Discounts:

Fruit	**Discount %**
Apple	10

Example Output::

Name	Qty	Total Price
Orange	2	10.00
Banana	1	20.00
Apple	1	31.50

Given Code:

```
import java.util.*;
import java.io.*;

class Grocery {
    String fruit;
    double price, total;
    Grocery(String fruit, double price, double total) {
        this.fruit = fruit;
        this.price = price;
        this.total = total;
    }
}

class Node{
    String fruit;
    int count;
    Node(String fruit, int count){
        this.fruit = fruit;
        this.count = count;
    }
}

abstract class GroceryReceiptBase {
    private Map<String, Double> prices;
    private Map<String, Integer> discounts;

    public GroceryReceiptBase(Map<String, Double> prices, Map<String, Integer> discounts) {
        this.prices = prices;
        this.discounts = discounts;
    }

    public abstract List<Grocery> Calculate(List<Node> shoppingList);
```

```
    public Map<String, Double> getPrices() {
        return prices;
    }

    public Map<String, Integer> getDiscounts() {
        return discounts;
    }
}

//Create the 'GroceryReceipt' class that extends GroceryReceiptBase above.
//Your code here

class Solution
{
    public static void main(String[] args) throws IOException
    {
        BufferedReader reader = new BufferedReader(new InputStreamReader(System.in));
        PrintWriter writer = new PrintWriter(System.getenv("OUTPUT_PATH"), "UTF-8");

        List<Node> boughtItems = new ArrayList<>();
        Map<String, Double> prices = new HashMap<>();
        Map<String, Integer> discounts = new HashMap<>();

        int n = Integer.parseInt(reader.readLine().trim());
        for (int i = 0; i < n; i++)
        {
            String[] a = reader.readLine().trim().split(" ");
            prices.put(a[0], Double.parseDouble(a[1]));
        }
        int m = Integer.parseInt(reader.readLine().trim());
        for (int i = 0; i < m; i++)
        {
            String[] a = reader.readLine().trim().split(" ");
            discounts.put(a[0], Integer.parseInt(a[1]));
        }
        int b = Integer.parseInt(reader.readLine().trim());
        for (int i = 0; i < b; i++)
        {
            String[] a = reader.readLine().trim().split(" ");
            boughtItems.add(new Node(a[0], Integer.parseInt(a[1])));
        }

        GroceryReceipt g = new GroceryReceipt(prices, discounts);
```

```
        List<Grocery> result = g.Calculate(boughtItems);
        for (Grocery x : result)
        {
            writer.printf("%s %.1f %.1f\n", x.fruit, x.price, x.total);
        }

        writer.flush();
        writer.close();
    }
}
```

SQL Question:

Table:

id	Account_holder	Amount
1	Ellis	$1024.00
2	Aaron	$230.88
3	Beatrice	$2356.00

Write an sql query to calculate the interest of each person at 5% per annum, and print it along with their names in ascending order of their names. The output must have the dollar sign in the amounts section, and must be rounded off to 2 decimal points.

Schema:

Accounts

Account	**INT**
Account_holder	**VARCHAR(100)**
Amount	**VARCHAR(100)**

The output was asked to not be printed in a table.

Sample Output:

```
Aaron      $51.20
Beatrice   $11.54
Ellis      $117.80
```