

BKIT – LESSON12 – BAI TAP

Question: Build an application ‘trader executing transactions’ for your manager to manage all system activities and answer following queries:

1. Find all transactions in the year 2011 and sort them by value (small to high).
2. Find all transactions have value greater than 300 and sort them by trader’s city
3. What are all the unique cities where the traders work?
4. Find all traders from Cambridge and sort them by name desc.
5. Return a string of all traders’ names sorted alphabetically.
6. Are any traders based in Milan?
7. Count the number of traders in Milan.
8. Print all transactions’ values from the traders living in Cambridge.
9. What’s the highest value of all the transactions?
10. Find the transaction with the smallest value.

Trader: name, city

Transaction: trader, year, value

Here’s the domain you’ll be working with, a list of Traders and Transactions

```
Trader raoul = new Trader("Raoul", "Cambridge");
```

```
Trader mario = new Trader("Mario", "Milan");
```

```
Trader alan = new Trader("Alan", "Cambridge");
```

```
Trader brian = new Trader("Brian", "Cambridge");
```

```
List<Transaction> transactions = Arrays.asList(  
    new Transaction(brian, 2011, 300),  
    new Transaction(raoul, 2012, 1000),  
    new Transaction(raoul, 2011, 400),  
    new Transaction(mario, 2012, 710),  
    new Transaction(mario, 2012, 700),  
    new Transaction(alan, 2012, 950)  
);
```