HOTEL ROOM RESERVATION

A hotel chain operating in Goa wishes to offer room reservation services over the internet. They have three hotels in Goa: GreenValley, RedRiver and BlueHills. Each hotel has separate weekday and weekend(Saturday and Sunday) rates. There are special rates for rewards customer as a part of loyalty program. Each hotel has a rating assigned to it.

GreenValley with a rating of 3 has weekday rates as Rs1100 for regular customer and Rs800 for rewards customer. The weekend rates are 900 for regular customer and 800 for a rewards customer.

RedRiver with a rating of 4 has weekday rates as Rs1600 for regular customer and Rs1100 for rewards customer. The weekend rates are 600 for regular customer and 500 for a rewards customer.

BlueHills with a rating of 5 has weekday rates as Rs2200 for regular customer and Rs1000 for rewards customer. The weekend rates are 1500 for regular customer and 400 for a rewards customer.

Can you write a program to help an online customer find the cheapest hotel?

The input to the program will be a range of dates for a regular or rewards customer. The output should be the cheapest available hotel. In case of a tie, the hotel with highest rating should be returned.

INPUT FORMAT: <customer_type>: <date1>, <date2>, <date3>, ... OUTPUT FORMAT: <name_of_the_cheapest_hotel>

INPUT 1: Regular: 16Mar2009(mon), 17Mar2009(tues), 18Mar2009(wed) OUTPUT 1:GreenValey

INPUT 2: Regular: 20Mar2009(fri), 21Mar2009(sat), 22Mar2009(sun) OUTPUT 2: RedRiver

INPUT 3: Rewards: 26Mar2009(thur), 27Mar2009(fri), 28Mar2009(sat) OUTPUT 3: BlueHills

Further Guidelines:

- You can use any programming language but Java is preferred.
- No database to be used.
- No GUI is required but will help if your code includes JUnit Testing.
- The code must be object oriented and should be well designed.
- Care should be given that if more data is added, the program need not change significantly.