

CS 149D  
Recitation, April 10, 2006  
**C++ Activity**

Name \_\_\_\_\_

**Quiz/Program:** This activity is open-book, open-notes, and “open-computer,” but must be your own work. You can ask the instructor questions, but she cannot write any code for you!

**Problem** (maybe “opportunity” is better): You’ve just found a pair of round-trip tickets to Rome for July 12-26 of this year, and \$2500 cash (Canadian). Unfortunately, the tickets have someone else’s name on them. But you realize that you have enough time to change you name legally and get a new passport by July 12, so of course you decide to do this. The packet also has a discount coupon (30% off) for the Golden Tulip Mecenate Palace 4 star (a 4 star is not as good as a 5 star but it is still a very! nice hotel) in Rome.

1. Go to xe.com and find the current exchange rate, (Canadian dollars to Euros). Record the rate here (how many Euros will 1 Canadian dollar buy?) \_\_\_\_\_
2. See if any rooms are available at The Golden Tulip Mecenate Palace Hotel in Rome for July 13 to July 26. (Remember, this is an overnight flight so you get to Rome early the next day.) (Search for “hotels Rome with a search engine such as Google)  
If a room is available, check here: \_\_\_\_\_  
If no room is available, check here \_\_\_\_\_
3. Regardless enter the room rate (Euros): \_\_\_\_\_  
(If you get a total cost for the 13 days, convert this to a daily rate)
4. Write a program (you may choose to edit one on the class web site) that:
  - a. Tells you how many days you can stay in the hotel until you’ve spent all of the \$2500 Canadian.

Hint: consider this. It’s not C++ but is an outline only

```
balance = 2500
dayCt = 0
while ( balance > dailyRoomRate )
    balance = balance - dailyRoomRate
    dayCt++
cout << dayCt
```

- b. If you stay 5 days, then sleep on a bench in the train station (it’s close by), first determine how much money you will have left after you pay your hotel bill, print it, then also print a table, nicely formatted, that converts Canadian dollars to Euros in \$20 increments, up to the amount of money you have left after paying for the room.
    - c. Don’t forget about your 30% hotel discount!
5. After you’ve finished, print your program and give it to the instructor. Make sure your name is included as a comment in your program.
6. What you do with the second ticket is up to you, but I like Rome, too. So does the lab instructor.