

Fall 2026 COP 3330 Program #1: Favorite Band

Program A: Favorite Musical Group (band.java)

The typical first Java program is to print out a single line that prints, "Hello World!" To have a little bit of fun editing this, have your program print out the name of your favorite musical group or individual performer.

Program B: Buying Concert Tickets (tickets.java)

You are buying tickets for your favorite musical group! There are two prices for tickets, one for lower bowl seats and a cheaper price for upper bowl seats.

Write a program that reads in the cost a lower bowl seat, the cost of an upper bowl seat, the number of lower bowl seats you want to buy and the number of upper bowl seats you want to buy and prints out the total cost of purchasing the tickets.

Assume that the price entered by the user per ticket is the full price including all taxes and fees.

Input Specification

The user will enter four values:

1. C_L – cost of a single lower bowl ticket (in dollars)
2. C_U – cost of a single upper bowl ticket (in dollars)
3. N_L – number of lower bowl tickets to purchase
4. N_U – number of upper bowl tickets to purchase

Here are the restrictions (you are guaranteed that these inequalities will hold and do NOT need to check them) on each of these values entered by the user:

$0 < C_U < C_L < 1000.00$, and each of these will be specified to 2 decimal places.

$0 \leq N_L, N_U \leq 100$. Both of these will be entered as integers.

Output Specification

Output a single sentence of the form:

Your total cost is \$X.

where X is the total cost in dollars for buying the tickets. There's no need to output X to two decimal places (this is optional), but the sample program runs on the next page show the output to 2 decimal places.

Sample Program Run #1 (User Input in Bold and Italics)

How much does a single lower bowl ticket cost in dollars?

249.99

How much does a single upper bowl ticket cost in dollars?

99.99

How many lower bowl tickets are you purchasing?

2

How many upper bowl tickets are you purchasing?

2

Your total cost is \$699.96.

Sample Program Run #2 (User Input in Bold and Italics)

How much does a single lower bowl ticket cost in dollars?

83.50

How much does a single upper bowl ticket cost in dollars?

30.00

How many lower bowl tickets are you purchasing?

10

How many upper bowl tickets are you purchasing?

5

Your total cost is \$985.00

Program C: Can You Go to the Concert? (attend.java)

You've been working hard babysitting this summer so you can attend the concert your favorite band is playing in town. Write a program that determines if you've earned enough money or not to attend the concert! Your program should prompt the user asking them how many hours they worked babysitting and how many dollars per hour they get paid. Your program should then prompt the user to enter the cost of a single concert ticket in dollars. Using this information, print out whether or not the user has earned enough money to go to the concert.

Input Specification

The user will enter four values:

1. H – number of hours baby sitting
2. R – dollars per hour earned babysitting
3. C – cost of a single concert ticket in dollars

H is an integer with $0 < H < 1000$.

R is a real number specified to two decimal places with $0 < R < 50.00$

C is a real number specified to two decimal places with $0 < C < 1000.00$

Output Specification

Output one of the two following sentences:

Great, you earned enough money to attend the concert!

Sorry, you haven't made enough money to attend the concert :(

Sample Program Run #1 (User Input in Bold and Italics)

How many hours did you babysit?

8

How much did you get paid per hour of babysitting?

12.50

What is the cost of a single concert ticket?

99.99

Great, you earned enough money to attend the concert!

Sample Program Run #1 (User Input in Bold and Italics)

How many hours did you babysit?

8

How much did you get paid per hour of babysitting?

12.50

What is the cost of a single concert ticket?

100.01

Sorry, you haven't made enough money to attend the concert :(

Deliverables

Please submit three separate .java files for your solutions to these problems via WebCourses by the designated due date:

Program A: **band.java**

Program B: **tickets.java**

Program C: **attend.java**

Please make sure to include a header comment and internal comments in your code and indent when appropriate.