

Skill Mill One

Here are a few practice programs to code into your own Java project. I suggest coding all the problems into one project. Once you have solved a problem, just comment it out with `/*` and `*/` and start solving the next problem underneath it. That way when you are done you will have all of these problems solved in one file.

[Problem 01 – Average Grade]

Ask the user to enter 3 grades.

Display the average of the 3 grades.

(remember that you can use parentheses in your math lines, just like you do on your calculators)

[Problem 02 – Hot Diggity Dog]

Write a program that asks the user how many hot dogs they want.

Hotdogs cost \$2.50 each. Tax is 7%.

Print out the cost, the tax, and the total cost including tax.

(don't worry about the decimals printing out like 12.5 instead of 12.50)

[Problem 03 – Pizza Palace]

The labor to produce a pizza costs \$1.20.

Cheese costs extra based on the formula $\$0.10 \times \text{radius} \times \text{radius}$.

Write a program that asks the user for the radius of a pizza, and then prints out the cost of making the pizza.

[Problem 04 – Hot Stuff]

Write a program that converts Fahrenheit to Celsius. The formula is $C = (5/9) * (F-32)$. The user will enter the Fahrenheit and the program will print out the Celsius.

Remember to use casting if needed! Test your program with several values!

sample data: 12 F is -11 C , -40 F is -40 C

[Problem 05 – Dream Team]

Volleyball teams can have 6 players. Write a program where the user enters a number of students in a class and then displays how many teams can be formed, and how many players will be left over. Ex: if the user enters 38, the program will show 6 teams and 2 left over.

(using integer math or modulus to your advantage would be wise!)

[Problem 06 – Loose Change]

The user will enter how many cents they have. Your program will display how many quarters, dimes, nickels, and pennies are required to make this amount. Use as many quarters as possible, then as many dimes, etc...

For example, if the user enters 83 cents, the program should print out

Quarters: 3

Dimes: 0

Nickels: 1

Pennies: 3