Exercises: C# Intro and Basic Syntax

Problems for exercises and homework for the "Programming Fundamentals Extended" course @ SoftUni.

Problem 1. Debit Card Number

Write a program, which receives **4 integers** on the console and **prints them** in **4-digit debit card format**. See the examples below for the appropriate formatting.

Examples

| Input | | Oı | ıtput | |
|-------------------------|------|------|-------|------|
| 12 433 1 5331 | 0012 | 0433 | 0001 | 5331 |
| 9182 4221 12 3 | 9182 | 4221 | 0012 | 0003 |
| 812 321 123 22 | 0812 | 0321 | 0123 | 0022 |

Problem 2. Rectangle Area

Write a program, which calculates a **rectangle's area**, based on its **width** and **height**. The **width** and **height** come as floating point numbers on the console, **formatted to the 2**nd **character after the decimal point**.

Examples

| Input | Output |
|------------|--------|
| 2 7 | 14.00 |
| 7 8 | 56.00 |
| 12.33 5 | 61.65 |

Problem 3. Miles to Kilometers

Write a program, which converts miles to kilometers. Format the output to the 2nd decimal place.

Note: 1 mile == 1.60934 kilometers

Examples

| Input | Output |
|-------|--------|
| 60 | 96.56 |

| Input | Output |
|-------|--------|
| 1 | 1.61 |

| Input | Output |
|---------|--------|
| 52.1113 | 83.86 |





















Problem 4. Beverage Labels

Write a program, which reads a food product name, volume, energy content per 100ml and sugar content per 100ml. Calculate the energy and sugar content for the given volume and print them on the console in the following format:

- Name as per the input
- Volume integer, suffixed by "ml" (e.g. "220ml")
- Energy content integer, suffixed by "kcal" (e.g. "500kcal")
- Sugar content integer, suffixed by "g" (e.g. "30g")

Examples

| Input | Output |
|------------------|--|
| Nuka-Cola 220 | 220ml Nuka-Cola: 660kcal, 154g sugars |
| 300 | |
| 70 | |

| Input | Output |
|--|---|
| Ice Cold Nuka-Cola 250 350 65 | 250ml Ice Cold Nuka-Cola: 875kcal, 162.5g sugars |

| Input | Output |
|--|---|
| Nuka-Cola Quantum 350 600 140 | 350ml Nuka-Cola Quantum: 2100kcal, 490g sugars |

Problem 5. * Character Stats

Write a program, which displays information about a video game character. You will receive their name, current health, maximum health, current energy and maximum energy on separate lines. The current values will always be valid (equal or lower than their respective max values). Print them in the format as per the examples.

Examples

| Input | Output |
|-----------------------------|---|
| Mayro 5 10 9 10 | Name: Mayro Health: Energy: . |

| Input | Output |
|--------|--------------|
| Bauser | Name: Bauser |
| 10 | Health: |
| 10 | Energy: |
| 10 | |
| 10 | |

| Input | Output |
|-------|--------|
| | |

| Input | Output | |
|-------|--------|--|
| • | • | |























| Loogi | Name: Loogi |
|-------|-------------|
| 8 | Health: |
| 20 | Energy: |
| 2 | |
| 14 | |

| | Name: Toad Health: |
|----|-----------------------|
| | Energy: |
| 0 | |
| 10 | |

Hints

• You can print a character multiple times, using new string(character, count).



















