# C++ Fundamentals: Exam 1

The following tasks should be submitted to the SoftUni Judge system, which will be open starting **Sunday, 20** **January 2019, 09:00** (in the morning) and will close on **Sunday, 20 January 2019, 15:00**.

For this exam, the code for each task should be a single C++ file, the contents of which you copy-paste into the Judge system.

Please be mindful of the strict input and output requirements for each task, as the tasks are evaluated automatically and not following the requirements strictly may result in your program’s output being evaluated as incorrect, even if the program’s logic is mostly correct.

You can use C++03 and C++11 features in your code.

Unless explicitly stated, any integer input fits into int and any floating-point input can be stored in double. On the Judge system, a C++ int is a 32-bit signed integer and a C++ double is a 64-bit IEEE754 floating point number.

NOTE: the tasks here are NOT ordered by difficulty level.

# Task 3 – Products and Cities

Write a program use a STL structure that a given number of Cities, Product and PricePerProduct, calculates the Total price (product \* pricePerProduct)

The first number is how many cities we want to input

The second is the CITY

The third is the price per product

The fourth is the quantity of products

### Example I/O

|  |  |
| --- | --- |
| Example Input | Expected Output |
| 2  sofia  5  1  plovdiv  3  2 | **plovdiv 6**  **sofia 5** |
| 3  Sofia  5  10  Plovdiv  6  2  Sofia  1  5  Plovdiv  4  2  Varna  3  2 | Plovdiv 20  **Sofia 55**  **Varna 6** |

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