COURSE INTRODUCTION

Objectives

- Understand the significance of the skills to be acquired in this course.
- Familiarize with the process of an online judge.

Preliminary

Go to the following link: Top Coding Interview Questions (Essential to Getting Hired) | Udemy

11 Essential Coding Interview Questions + Coding Exercises!

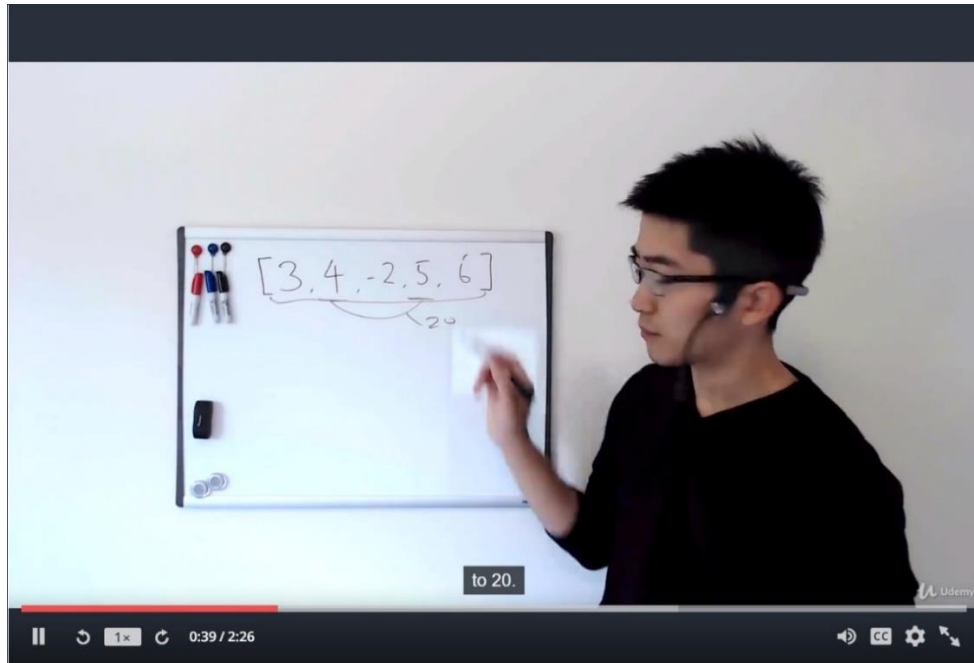4.6 ★ (3,976 ratings) 19,209 students

Course content

6 sections • 35 lectures • 2h 6m total length   **Expand all sections**

∧ **Introduction and Problem Solving Tips**		5 lectures • 15min
▶ Introduction	Preview	01:23
▶ What Is a Typical Coding Interview Like?	Preview	02:26
▶ Problem Solving Technique #1 for Coding Interviews	Preview	05:27
▶ Problem Solving Technique #2 for Coding Interviews		03:06
▶ Problem Solving Technique #3 for Coding Interviews		02:17
∨ **Arrays**		6 lectures • 15min
∨ **Strings**		5 lectures • 14min
∨ **Two-Dimensional Arrays**		9 lectures • 45min

Watch the following video (2:26 minutes long!)

It is the one titled "What Is A Coding Interview Like"

This is a <u>real</u> coding interview question !!!

Questions like this are also asked in the interview with Google, Facebook, Microsoft, Amazon, etc.

THIS COURSE IS ABOUT THESE COMPUTATIONAL PROBLEMS!

Online Judge

Examples

- acm.timus.ru
- spoj.com
- dmoj.ca
- judge.u-aizu.ac.jp/onlinejudge/

An example of problem description (acm.timus.ru)

1073. Square Country

Time limit: 1.0 second
Memory limit: 64 MB

There live square people in a square country. Everything in this country is square also. Thus, the Square Parliament has passed a law about a land. According to the law each citizen of the country has a right to buy land. A land is sold in squares, surely. Moreover, a length of a square side must be a positive integer amount of meters. Buying a square of land with a side a one pays a^2 quadrics (a local currency) and gets a square certificate of a landowner.

One citizen of the country has decided to invest all of his N quadrics into the land. He can, surely, do it, buying square pieces 1×1 meters. At the same time the citizen has requested to minimize an amount of pieces he buys: "It will be easier for me to pay taxes," — he has said. He has bought the land successfully.

Your task is to find out a number of certificates he has gotten.

Input

The only line contains a positive integer $N \leq 60\ 000$, that is a number of quadrics that the citizen has invested.

Output

The only line contains a number of certificates that he has gotten.

Sample

input	output
344	3

Problem Author: Stanislav Vasilyev
Problem Source: Ural State Univerisity Personal Contest Online February'2001 Students Session
Tags: dynamic programming (hide tags for unsolved problems)

Difficulty: 143   Printable version   Submit solution   Discussion (53)
✔ My submissions   All submissions (37833)   All accepted submissions (12813)   Solutions rating (9380)

Your task

1. Create an account at an online judge site.

2. Pick an relatively easy problem and proceed to solve it with Python.
    o   At older sites, such as acm.timus.ru, many problems may not be solvable within time limit if use Python. Most newer sites can cope with Python submission effectively.

3. Pay attention to the exact description of input and output. You program must output in EXACTLY the same format that the problem prescribed, or your submission will not be evaluated as "accepted".

4. Submit your solution to the website. Make sure that you choose the correct programming language.
    o   If your program gets accepted, this task is fulfilled.
    o   On the other hand, you may get various "not accepted" responses e.g. wrong answer for a case, time limit exceed, etc. In these cases, you need to edit your program and resubmit until it is accepted.

Recommended, but not essential

•   Try the task again at another online judge.

Extra

•   On MS Windows, a text file that contains a test case can be input to a Python program on the "cmd" shell. On a Mac PC, this is equivalent to using "terminal". However, this requires that Python is installed with a PATH (an environment variable) being set to know where Python is installed in your system. The method of inputting a text file is called "redirection".
•   Redirection is not available in the command shell that is built in the Visual Studio IDE.
•   An additional tutorial on how to create "cmd" shell that will open in the working directory (folder) is also provided in the course material of this introductory week.