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Foreword

Long time ago (exactly the Tuesday November 11th 2003 at 3:55:57 UTC), I received an e-mail with the following sentence: I should say in a simple word that with the UVa Site, you have given birth to a new CIVILIZATION and with the books you write (he meant “Programming Challenges: The Programming Contest Training Manual” [34], coauthored with Steven Skiena), you inspire the soldiers to carry on marching. May you live long to serve the humanity by producing super-human programmers.

Although it’s clear that was an exaggeration, to tell the truth I started thinking a bit about and I had a dream: to create a community around the project I had started as a part of my teaching job at UVa, with persons from everywhere around the world to work together after that ideal. Just by searching in Internet I immediately found a lot of people who was already creating a web-ring of sites with excellent tools to cover the many lacks of the UVa site.

The more impressive to me was the ‘Methods to Solve’ from Steven Halim, a very young student from Indonesia and I started to believe that the dream would become real a day, because the contents of the site were the result of a hard work of a genius of algorithms and informatics. Moreover his declared objectives matched the main part of my dream: to serve the humanity. And the best of the best, he has a brother with similar interest and capabilities, Felix Halim.

It’s a pity it takes so many time to start a real collaboration, but the life is as it is. Fortunately, all of us have continued working in a parallel way and the book that you have in your hands is the best proof.

I can’t imagine a better complement for the UVa Online Judge site, as it uses lots of examples from there carefully selected and categorized both by problem type and solving techniques, an incredible useful help for the users of the site. By mastering and practicing most programming exercises in this book, reader can easily go to 500 problems solved in UVa online judge, which will place them in top 400-500 within ≈ 100000 UVa OJ users.

Then it’s clear that the book “Competitive Programming: Increasing the Lower Bound of Programming Contests” is suitable for programmers who wants to improve their ranks in upcoming ICPC regionals and IOIs. The two authors have gone through these contests (ICPC and IOI) themselves as contestants and now as coaches. But it’s also an essential colleague for the newcomers, because as Steven and Felix say in the introduction ‘the book is not meant to be read once, but several times’.

Moreover it contains practical C++ source codes to implement the given algorithms. Because understand the problems is a thing, knowing the algorithms is another, and implementing them well in short and efficient code is tricky. After you read this extraordinary book three times you will realize that you are a much better programmer and, more important, a more happy person.



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