A Study Guide for Cracking the <Coding> Tests and Interviews

By Dahab Shakeel

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1.Before Getting Started

- This guide is based on my personal experience and is highly inspired by a lot of useful resources I came across during my college.

- I don't guarantee you a job at FAANG but if you follow this guide with full dedication you will have a way better chance to land a good job offer.

- This guide covers all fundamentals of Algorithms you may need to land your dream job.

- It is not necessary that your dream job is FAANG or even in the US so this guide will prepare you to be ready for coding interviews at any highly skilled company.

- This guide will also prepare you for coding tests at companies in South Korea (e.g. SAMSUNG).

- This guide is not explicit for any programming language but since I used to practice JAVA, there are some extra notes for JAVA users.

- The tasks within this guide are aimed to make you prepared within 2-4 months depending on how much time you put every week.

- Enjoy < coding> and don't stress too much about your future!

2.Weekly Schedule

This weekly schedule is aimed towards getting comfortable with the programming language of your preference and getting the hang of the basic algorithms.

- Week-1:

1) Pick a programming language (Java and C++ recommended)
2) Review Basics of your Programming language:
   A- Read/Write from files
   B- Read Input from console
   C- Split Strings based on a delimiter
   D- Change Strings to other data types and vice-versa
   E- String functions
   F- Arrays
   G- Copying and sorting arrays (and other array functions)
   H- Classes/ Functions/Array of class instances
   I- Dynamic Arrays (e.g. Vectors/ ArrayList)

3) Data Structures Review (Just practice how to define and work with each of these):
   A- Stacks
   B- Queues (e.g. Linkedlist Normal Queues/ Priority Queues)
   C- LinkedList
   D- Trees (General/Binary Search)
   E- Graphs (Directed/Undirected)
   F- HashTable/ HashMap/ LinkedHashMap