



# Arabic Competitive Programming

From Problem 2 Solution in  $O(1)$

## Channel Road Map

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# C++

- [Series](#) covering around programming 1 (Intro)
- More:
  - STL overview, Bits, Compilation Process, C, C++11
  - Provide some nice practice problems
- Using Debugger
- Mid-scale **Project** with partial code
- Road Map for what else in C++
- Tips for a better career

# Data Structure

- The [series](#) covers basic and advanced topics
- Some topics such Fenwric tree & Binary indexed tree are not taught in faculty classes
- Try to find projects on web courses to do

# Algorithms

- Intended decision: Arabic speakers
  - Arabic speech / English text
- Our approach
  - Focus on competitive programming needs
  - Describe an algorithm and variations of interest
  - Mainly Intuitions, but rarely proofs
- Is channel enough for pure algorithms study?
  - No. Intended decision: no proofs
  - After finishing our video. Code algorithm. Practice it
  - Go to a book (e.g. Intro to algorithms) study **proof**
  - Or watch it in a video (e.g. from MIT algorithms)

# For Algorithms Course Study

- You can go first with selected [playlist](#)
  - It has some good coverage
- Then? Go to the [playlists](#) and select whatever
  - Don't worry from order...algorithms topics have weak dependencies
  - One suggested order: More graph, greedy, DP, search

# For Competitions

- Start with [newcomers](#) playlist
- Then go to training road [maps](#) playlist
  - First videos for juniors
  - Further videos for further levels
  - Videos will have more guide and info
- You will also find
  - [Thinking](#) techniques playlist
  - Problem [solving](#) playlist

# Finally

- Others related Videos [Playlist](#)
  - E.g. in programming, algorithms or competitions
- Out of scope
  - Cracking algorithms [interviews](#)
  - Discussion about [FCI-CU](#)
- Content Licence
  - Free to use - in whatever way - on your responsibility
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# تم بحمد الله

علمكم الله ما ينفعكم

ونفعكم بما تعلمتم

وزادكم علماً