

Why are programming interviews difficult?

They are completely different from everyday programming work

Normal programming is 80% routine and 20% innovative - programming interviews focus only on the innovative bits

It is possible to write inefficient and bad programs in everyday life and still get by - there is no one watching to see how well or badly you're coding

During an interview everything you say and every line you write is analyzed and critiqued - it is very stressful to operate under the spotlight

So what do you do?

Brush up on fundamentals of coding, starting from 0

Understand and internalize basic algorithms, data structures and design again starting from 0

Why from 0? You might know the solution to lots of stuff without knowing why, interviewers love to ask why, how well you articulate the answer makes all the difference

Practice and practice again

To crack the programming interview you need

Core programming concepts at your fingertips

Supreme attention to detail

Understanding of standard algorithms and data structures - but more importantly why they are used

Ability to apply these to any problem - at least to get started

Most importantly - lots and lots of practice

Every line of code has a reason to exist - and no line should exist without a reason

There are trade-offs made in every line of code written

Understanding these, even for extremely small and boring programs, make you a better programmer and better at interviewing

Interviewers judge the details as well as the bigger picture - need to get both of those right

Start from very small and basic programs before going on to larger problems

Learning and memorizing lots of standard problems help - but it's even more important to internalize why a particular algorithm works the way it does - this is the secret sauce to being able to apply these techniques anywhere

There is no guarantee that you would have heard the interview problem before, however, if you cover enough breadth during practice you'll find that every problem will be similar to another - that'll help you get started