

Re: interview question on primes

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- *From:* quasi <quasi@xxxxxxxx>
 - *Date:* Mon, 25 Feb 2008 20:34:30 -0500
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On Mon, 25 Feb 2008 16:54:03 -0800 (PST), Digital Puer <digital_puer@xxxxxxxxxxxx> wrote:

Got this on a software engineering interview question:
given two integers A and B, find all primes between them.

I basically wrote an initial function, `bool isPrime(int i)`, which loops over all numbers between 2 and `sqrt(i)` to see if `i%num == 0`, in which case the number is not a prime. With this function, I then loop between A and B, calling `isPrime()` on each value.

Any better ideas?

For an interview, I think that's fine -- no need to get fancy.

In fact, had you tried for greater order of magnitude efficiency at the expense of clarity, that would have shown bad judgement.

Think about it from the `_interviewer's_` point of view. Why are they asking this question? They can't assume that the applicant is a Number Theory expert, hence they would naturally expect a simple algorithm.

If the applicant can't even manage get `_some_` algorithm, or makes manages one, but makes a mess of it, that shows a lack of basic mathematical understanding and/or a lack of programming skills.

On the other hand, if the applicant goes overboard and tries to make a research project out of it, that's also bad sign. It suggests that for real world projects, there would likely be missed deadlines, not to mention complex, hard to maintain code.

Based on that analysis, I think you handled it just right.

quasi

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