

Re: Powers of 5

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"Josh" <jzenker@xxxxxxxxxx> writes:

Hi, I'm an undergrad studying computer science. I discovered, while studying for a computer science final, that I still haven't come up with an answer to a question that was offered as extra credit on our first quiz in the course. We were given the following Pascal code.

```
function power(n: integer): integer;
begin
  if n <= 1 then
    return (5)
  else
    return (5 * power(n-1))
end; {power}
```

We were then asked: "Can you modify the function in such a way that for arguments of the form 2^k it computes the result with just $k+1$ calls?" I'm not especially adept with math, and I have no idea how to approach the question. Please point me in the right direction; I would really like to understand this.

If you still don't know the russian peasant algorithm for multiplying, something that most competent people here probably became aware of under one of several names or rediscovered themselves while their age was still in single digits, then either you're going to fail your degree horribly, or your degree won't be worth the paper it's written on.

However, I'm glad to see that there are people feeding my prejudice that most modern CS degrees are possibly the best indicator of someone being *_unsuitable_* for a programming job.

The answer's so trivially simple I'm sure you'll get it from others in the thread.

Phil

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"Home taping is killing big business profits. We left this side blank so you can help." — Dead Kennedys, written upon the B-side of tapes of

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