Subject: Calculating Pi

Posted by Braedley on Sun, 01 Apr 2007 17:07:05 GMT

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Does anyone have code that can calculate pi to an arbitrary precision? This is purely an academic endeavour.

Actually that's a lie. This is just so that I can show others up.

Subject: Re: Calculating Pi

Posted by JD Smith on Mon, 02 Apr 2007 22:04:53 GMT

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On Sun, 01 Apr 2007 10:07:05 -0700, Braedley wrote:

- > Does anyone have code that can calculate pi to an arbitrary
- > precision? This is purely an academic endeavour.

>

> Actually that's a lie. This is just so that I can show others up.

I say invest in an industrial-sized box of toothpicks and lock yourself in the tiled-floor bathroom:

http://en.wikipedia.org/wiki/Buffon's needle

JD

Subject: Re: Calculating Pi

Posted by Paolo Grigis on Tue, 03 Apr 2007 07:44:25 GMT

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jschwab@gmail.com wrote:

- > On Apr 2, 4:09 am, Paolo Grigis <pgri...@astro.phys.ethz.ch> wrote:
- >> The problem here is not one of method for computing Pi
- >> (as remarked, plenty are available), but rather the lack
- >> of an arbitrary precision library in IDL... (or has
- >> anybody already written one?)

>>

- >> Ciao,
- >> Paolo

>

- > There are a class of formulas called Bailey-Borwein-Plouffe (BBP) that
- > let you find the nth digit, without having found the preceding ones.
- > If you head to your library or Google around, I'm sure you can find
- > out enough to show off to your heart's content. With double precision,

- > I think that should let you get the first 10^7 digits or so.
- >
- > I Googled and found code examples here
- > http://crd.lbl.gov/~dhbailey/expmath/bbp-codes/

>

- > Cheers,
- > Josiah

Yes, but these are hexadecimal digits, which you still have to convert into decimal form... so you still need at least one routine from the arbitrary precision library.

Ciao, Paolo

>