
Subject: math functions, MSC and MinGW compilers. Floating-point arithmetic.
Posted by [281264](#) on Sun, 10 Oct 2010 10:01:15 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi,

I have some queries regarding Microsoft and MinGW compilers, related to U++ and floating point arithmetic. I am attaching a simple example about calculating the absolute value of a double precision variable:

1.- When using the Microsoft C++ compiler (latest available issue), the application is compiled without problems and it works correctly. The same operation with MinGW compiler produces an error related with ambiguity of functions. Why is this happening?. I notice that cmath library functions are available in U++ without the need to include <cmath>.

2.- I am interested in developing algorithms for exact floating point arithmetic, capable to be compiled with both MSC and MinGW compilers and capable to work with Intel and AMD

someone interested in the matter, I would appreciate hints.

Many thanks.

Cheers,

Javier.

File Attachments

1) [test_abs_function.7z](#), downloaded 283 times

Subject: Re: math functions, MSC and MinGW compilers. Floating-point arithmetic.
Posted by [mirek](#) on Sun, 10 Oct 2010 16:53:41 GMT

[View Forum Message](#) <> [Reply to Message](#)

281264 wrote on Sun, 10 October 2010 06:01Hi,

I have some queries regarding Microsoft and MinGW compilers, related to U++ and floating point arithmetic. I am attaching a simple example about calculating the absolute value of a double precision variable:

1.- When using the Microsoft C++ compiler (latest available issue), the application is compiled without problems and it works correctly. The same operation with MinGW compiler produces an error related with ambiguity of functions. Why is this happening?.

This is pretty much normal - compilers have different understanding of C++ standard. Well, in practice they are the same for the most part, but there are some small differences. Sometimes

you hit one during the development. Fix is usually simple.

Quote:

I notice that cmath library functions are available in U++ without the need to include <cmath>.

Yes, it is included by standard by including Core.h.

Quote:

2.- I am interested in developing algorithms for exact floating point arithmetic, capable to be compiled with both MSC and MinGW compilers and capable to work with Intel and AMD

someone interested in the matter, I would appreciate hints.

MSDN

<http://gcc.gnu.org/>

Mirek

Subject: Re: math functions, MSC and MinGW compilers. Floating-point arithmetic.

Posted by [281264](#) on Wed, 13 Oct 2010 08:28:32 GMT

[View Forum Message](#) <> [Reply to Message](#)

Thank you.

Javier
