Subject: Complex numbers..How to use in upp??
Posted by Monty.mvh on Fri, 16 Sep 2011 11:42:20 GMT
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Hi,
I need to use complex numbers for some mathematical calculations.
Can anyone guide me how to use it ...

Subject: Re: Complex numbers..How to use in upp??
Posted by 281264 on Fri, 16 Sep 2011 20:59:02 GMT
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Hi,

Check complex class in C++ by including #include<complex> in your header file or .cpp file.

Here is a simple example:

```
// Demonstrate complex class
#include <iostream>
#include <complex>
using namespace std;

int main()
{
 complex<double> complex_01(10, 20);
 complex<double> complex_02(40, -3);
 cout << complex_01 <<endl;
 cout << complex_02 << endl;
 complex<double> complex_03 = complex_01 + complex_02;
 cout << complex_03 << endl;
 return 0;
}
```

Cheers,

Javier

Subject: Re: Complex numbers..How to use in upp??
Posted by Monty.mvh on Sat, 17 Sep 2011 04:34:39 GMT
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Thanks Javier,

Can i individually access real and imaginary parts.. Something like this: a[0].re =3 and a[0].im = 5

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Subject: Re: Complex numbers..How to use in upp??
Posted by dolik.rce on Sat, 17 Sep 2011 10:12:30 GMT
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There is a support for complex numbers in U++ Core: the Complex class. See uppsrc/Core/Complex.h for some details. It is based on the std::complex that Javier recommended in previous post, but adds some integration with U++, e.g. Value compatibility.

Simple usage:#include <Core/Core.h>

using namespace Upp;

```
CONSOLE_APP_MAIN{
 Complex a(1,2);
 Cout() << "a = " << a << "\n";
 Cout() << "Im(a) = " << a.imag() << "\n";
 Cout() << "Re(a) = " << a.real() << "\n";
 Cout() << "|a| = " << abs(a) << "\n";
 Cout() << "2a = " << Complex(a+a) << "\n";
 Cout() << "a^2 = " << Complex(a*a) << "\n";
}
```

Best regards,
Honza

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Subject: Re: Complex numbers..How to use in upp??
Posted by 281264 on Sat, 17 Sep 2011 16:27:22 GMT
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Honza,

Thank you. I was not aware about this Upp class; certainly it will be useful.

Cheers,

Javier

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Subject: Re: Complex numbers..How to use in upp??
Posted by kohait00 on Wed, 23 Nov 2011 09:50:19 GMT
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it's been added shortly  see last release infos..