Java Class: Complex

Summary

Adds basic complex number manipulation class to java. The imaginary part is specified by the letter **i**.

Installation

Move this class to a directory in your CLASSPATH list.

Public Fields

- *None.*

Constructors

- *Complex()* - Forms the complex number **0+0i**.
- *Complex(double a, double b)* - Forms the complex number **a+bi**.
- *Complex(Complex c)* - Returns a copy of complex number **c**.

Public Methods

- *double Real()* - Returns the real part of the complex number.
- *double Imag()* - Returns the imaginary part of the complex number.
- *String toString()* - Returns a string representation of the complex number in the format a+bi.
- *Complex CAddC(Complex cnum)* - Adds the complex number **cnum** to the current complex number. Returns **this**.
- *Complex CSubC(Complex cnum)* - Subtracts the complex number **cnum** from the current complex number. Returns **this**.
- *Complex CMultC(Complex cnum)* - Multiplies the current complex number by **cnum**. Returns **this**.
- *Complex CDivC(Complex cnum)* - Divides the current complex number by **cnum**. Throws ArithmeticException on a divide-by-zero attempt. Returns **this**.
- *Complex CMultD(double dnum)* - Multiplies the currrent complex number by the real number dnum. Returns **this**.
- *Complex CDivD(double dnum)* - Divides the current complex number by the real number **dnum**. Throws ArithmeticException on a divide-by-zero attempt. Returns **this**.
- *boolean equals(Complex cnum)* -If the current complex number and **cnum** are equal, returns **true**, otherwise returns **false**.
- *double Modulus()* - Returns the modulus.
- Complex Conjugate() - Creates the complex conjugate. Returns **this**.
- *double Phase()* - Returns the phase (in radians).
- *String AboutThisClass()* - Returns copyright and legal use information.