Fundamentals of Computer Programming 2
Practice Problems – February 7, 2003

Instructor: Ravi Kant   Ryerson 177   e-mail: **ravikant@cs.uchicago.edu**
Office Hours : Wed, Fri : 1:00PM - 1:45PM

TA: Xiaofei He   Eck 2-B   e-mail: **xiaofei@cs.uchicago.edu**

Practice problems for today :

Check out the examples. For the class "complex" defined in the examples write the following member functions :

1. **double abs()** which calculates the absolute value of the complex number ($\mathrm{abs}(x+iy) = \sqrt{x^2 + y^2}$).

2. **double reciprocal()** which calculates the reciprocal $(1/(x+iy))$ for the complex number $x + iy$.

Write the following functions for doing complex arithmetic

1. **complex product(complex z1, complex z2)** for calculating the product of the 2 complex numbers z1 and z2.

2. **complex ratio(complex z1, complex z2)** for calculating $z1/z2$.

3. **complex pow(complex z1, complex z2)** for calculating $z1^{z2}$.