Quiz – 3
April 27, 2006

1) (5 pts) List 4 key features of Object Oriented programming:

   i. Inheritance
   ii. Encapsulation
   iii. Polymorphism
   iv. Data Abstraction

2) (15 pts) Consider the following class hierarchy:

   class person {...}
   class student : public person {...}
   class professor : public person {...}

   void person::print_label() {...}
   void professor::print_label() {...}
   void student::print_label(int student_id) {...}

   student s;
   professor p;
   person *x = &s;
   person *y = &p;
   person z = p;

   Which print_label methods will be called upon the following invocations assuming dynamic method binding is in effect:

   s.print_label();   \to person::print_label();
p.print_label();   \to professor::print_label();
x->print_label();   \to person::print_label();
y->print_label();   \to professor::print_label();
z.print_label();   \to person::print_label();