CSCI 259/390
Homework 6 – Inheritance and Polymorphism

Time Due:
Due: Nov. 2, 10:00 PM

Work to Do:
For this homework, you are to do the following:

1. Create three C++ files named (use your actual last name):
   a. lastname_hw6.cpp
   b. lastname_hw6.h
   c. lastname_hw6_main.cpp

2. In "lastname_hw6_main.cpp":
   a. You may use the provided main.

3. For "lastname_hw6.cpp" and "lastname_hw6.h" implement the Student class and Teacher class of the code.
   a. The class definitions are given to you, you just need to add the additional code to the cpp file.
   b. You must also implement the average_ages() function of the Person class.

4. 10 points of the assignment will be for "pretty print." In other words, your output should be easy to read and understand.

5. 10 points of the assignment will be for "pretty code." In other words, your code you be formatted cleanly and with comments.

Note:
• Remember to save, compile, and test often. It is much easier to write code if you compile and test it as you go instead of trying to write the whole thing at once.
• The provided code is also available on: http://turing.cs.olemiss.edu/~chhumph1/assignments/

Submission:
1. Use WinSCP to copy your program from Turing to your machine
2. Send your code (all .cpp and .h files) as an attachment to chhumph1@olemiss.edu
3. Subject of email should be: Lastname – HW 6
Example Output:

How many people: 6

-------- Enter information for person: 1 --------
0) Person
1) Student
2) Teacher
What type of person? 0
Enter person first name: Bob
Enter person last name: Sagat
Enter person age: 55

-------- Enter information for person: 2 --------
0) Person
1) Student
2) Teacher
What type of person? 1
Enter person first name: Blake
Enter person last name: Stevenson
Enter person age: 19
Enter class taking: Calculus III

-------- Enter information for person: 3 --------
0) Person
1) Student
2) Teacher
What type of person? 2
Enter person first name: Courtney
Enter person last name: Humphries
Enter person age: 26
Enter class teaching: Introduction to C++ Programming

-------- Enter information for person: 4 --------
0) Person
1) Student
2) Teacher
What type of person? 2
Enter person first name: Smarty
Enter person last name: Pants
Enter person age: 99
Enter class teaching: How to Learn Everything

-------- Enter information for person: 5 --------
0) Person
1) Student
2) Teacher
What type of person? 1
Enter person first name: Dumb
Enter person last name: Dummy
Enter person age: 88
Enter class taking: How to Learn Everything
 Enter information for person: 6

0) Person
1) Student
2) Teacher

What type of person? 0
Enter person first name: George
Enter person last name: Washington
Enter person age: 279

---------- Sorted People ----------

---- Person: 1 ----
Blake Stevenson, 19 years old
Takes the class: Calculus III

---- Person: 2 ----
Courtney Humphries, 26 years old
Teaches the class: Introduction to C++ Programming

---- Person: 3 ----
Bob Sagat, 55 years old

---- Person: 4 ----
Baron Ogilvy, 88 years old
Takes the class: How to Learn Everything

---- Person: 5 ----
Smarty Pants, 99 years old
Teaches the class: How to Learn Everything

---- Person: 6 ----
George Washington, 279 years old

---------- People Information ----------
Number of people: 6
Average age: 94.3333