A201/A597 Introduction to Programming I

First Summer 2007

Lecture Five: Monday May 14, 2007 (ED1204)

Announcement: first week's assignment (comprising labs 1, 2, 3 and homework 1, 2) is due tomorrow in OnCourse. Today in class we will show how you can turn it in in stages.

Today we will also discuss sample problems from the current reading assignment. Lab and lecture notes for the rest of the week will be posted tonight. We will change the style of the lab notes to better guide you through the chapters and programs in the book.

Here are the problems we will discuss today:

1. Write a program that accepts any number of lines from the user, one at a time, and prints them back. When the user enters the string `bye` the program ends and prints the number of lines the user has entered up to that point (with the exception of `bye`).

2. Write a program that creates random addition questions (by generating random integer operands between -50 and 50) and asks the user to solve them. Your program should keep track of the number of good answers as well as of total questions asked. Write two such programs: one that asks ten questions then ends, and another one that ends only when the user types `bye`. Either way the program should report a score at the end.

3. Write a program that randomly picks an integer between 0 and 100 and then asks the user to guess it. The game ends when the user guesses the number. Each time the user enters a guess value feedback is provided (try higher, try lower) and a count is kept that records the number of incorrect guesses made up to that point. Report this number when the game ends.

4. Modify the program above so that if the user makes 6 wrong guesses the game is lost.

5. Write a program that expects the user to enter a number per line and prints back (after every line) the current average of all the numbers entered up to that point. Program stops when the user enters the string `bye`.

After the lecture we will post the code we develop.

We will also discuss number formatting by looking at

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http://docs.python.org/lib/typesseq-strings.html
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