

Homework #3 Introduction to Computing

Due: Feb. 13, 2010 (Saturday at 11:59 PM)

You are to write a program to solve Project 7 on page 119:

“Teachers in most school districts are paid on a schedule that provides a salary based on their number of years of teaching experience. For example, a beginning teacher in the Lexington School District might be paid \$30,000 the first year. For each year of experience after this first year, up to 10 years, the teacher receives a 2% increase over the preceding value. Write a program that displays a salary schedule, in tabular format, for teachers in a school district. The inputs are the starting salary, the percentage increase, and the number of years in the schedule. Each row in the schedule should contain the year number and the salary for that year.”

ADDITIONAL REQUIREMENTS:

Before you start writing your program, (re)read section 6.2 on Problem Solving with Top-Down Design, because I want you to actually design your program. Split your program up into well-defined functions by doing a top-down design and developing a structure chart.

When you write your program, be sure to use:

- meaningful variable names with good style (i.e., use CamelCase or use underscores)
- docstring comments at the start of the program **and** after the “def”inition of each function which describing what they do
- a main function (see lab4 Part C) located at the top of program with a call to it at the bottom of the file to start execution
- global constants where appropriate with good style (ALL_CAPS_AND_UNDERSCORES).

Save your program in a file called salarySchedule.py

Submit your homework electronically at http://www.cs.uni.edu/~schafer/submit/which_course.cgi

The steps for the homework submission system are:

1. Write, debug, and test your program. Save it in a file called salarySchedule.py.
2. Log on to the submission system at: http://www.cs.uni.edu/~schafer/submit/which_course.cgi
(It is very likely that you will get some security certificate warnings when trying to use this. You may add an exception and accept the existing security certificate.) Use the same AD-ITS User name and password you use to log on the lab computers.
3. Select the course and section number of "810:051, Intro to Computer, Fienup". Click the "Continue".
4. Select the homework that you wish to submit: "HW 3: Teacher Salary Schedule". Click "Continue"
5. Specify how many extra files you want to submit. Just leave it at 0. Click the "Continue" button.
6. Upload your program by Browsing and selecting your salarySchedule.py file. Click the "Continue" button.
7. The next page reports on the status of the upload(s). You can always continue to upload a better version of the program until the deadline. The newer file will replace an older file of the same name.