**Assignment**
HW09: Sebesta: Problem Set 14.(1, 7, 14); Programming Exercises Ex 14.(2, 3)
HANDWRITTEN – Due at beginning of class on due date.
PROGRAM – Due at midnight, via Blackboard, at midnight on day prior to due date.

**Handwritten Portion**

1. What did the designers of C get in return for not requiring subscript range checking?

7. In a language without exception-handling facilities, we could send an error-handling procedure as a parameter to each procedure that can detect errors that must be handled. What disadvantages are there to this method?

14. Summarize the arguments in favor of the termination and resumption models of continuation.

CS-3160
**Programming Portion**

# NOTE: For ALL of these programs, you are to use PYTHON (v3.3 or later)

2. Suppose you are writing a C++ function that has three alternative approaches for accomplishing its requirements. Write a skeletal version of this function so that if the first alternative raises any exception, the second is tried, and if the second alternative raises any exception, the third is executed. Write the code as if the three methods were procedures named `alt1`, `alt2`, and `alt3`.

3. Write a Java program that inputs a list of integer values in the range of −100 to 100 from the keyboard and computes the sum of the squares of the input values. This program must use exception handling to ensure that the input values are in range and are legal integers, to handle the error of the sum of the squares becoming larger than a standard `Integer` variable can store, and to detect end-of-file and use it to cause the output of the result. In the case of overflow of the sum, an error message must be printed and the program terminated.

**Grading Rubric**
The assignment is worth 25 pts (as a whole) and the score will be recorded as a percentage of that amount.

|  |  | Handwritten |  |  |  |  | Programming |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Problem | 14.1 | 14.7 | 14.14 |  |  |  | 14.2 | 14.3 |  |  |
| Points | 2 | 3 | 3 |  |  |  | 8 | 9 |  |  |

10% Physical Format
50% Answers correct (and supported by work)
40% Effort evidenced by the submitted work