

Department of Computer Science and Engineering
University of Notre Dame

CSE 232 - Advanced Programming
Fall 2004

Assignment 3

Reading:

Read the rest of chapter 2 of the textbook. Review all class notes.

It is also highly recommended that you read the summary at the end of each chapter, and that you do the self-review exercises, for which answers are provided.

Problem 1:

Do problem 2.28, page 162 of the textbook.

Problem 2:

Redo problem 2 from assignment 2, but this time allow to user to keep entering new sets of coefficients to solve new equations. The program terminates when a value of 0 is entered for a .

Recall that your program finds the roots to a quadratic equation of the form $ax^2 + bx + c = 0$. The coefficients a , b , and c should be entered on one line. The program must separate the three possible alternatives for the discriminant (positive, zero, negative).

Problem 3:

Do problem 2.38, part c, page 163 of the textbook (the problem finds an approximation for e^x using an infinite series). The value of x is entered by the user. The summation must keep adding terms until a term is less than 0.001. Compare your result with the one computed using the `exp ()` function.

Due date:

Friday 9 / 10 / 04, at 2 am.

Make sure each of your programs contains your name in the comment section. You must place the source codes (programs) for the three programs, in your personal dropbox. Do not submit any executables. Use the same file naming convention as in previous homeworks. Make sure you use the `g++` compiler.