

Department of Computer Science and Engineering
University of Notre Dame

CSE 232 - Advanced Programming
Fall 2004

Assignment 2

Reading:

Read sections 2.1 through 2.6 of the textbook. Review all class notes.

Problem 1:

Write a program to read two integers from a user and to then compute and print their sum, difference, product and quotient. Note that the quotient is a real number, and that in the event the second integer is zero, you will need to display a message stating so.

Data Requirements:

Problem Input

```
int x, y;           // two numbers
```

Problem Output

```
int sum;           // sum of x and y
int difference;    // difference of x and y
int product;       // product of x and y
double quotient;  // quotient of x by y
```

Problem 2:

Write a program that finds the roots to a quadratic equation of the form $ax^2 + bx + c = 0$. The program should ask for the coefficients a , b , and c , should compute the discriminant, and should then determine how many solutions there are, and what they are. For this problem, assume that x is a real number. The program should be set up for a single quadratic equation.

Due date:

Friday 9 / 3 / 04, at 2 am.

Make sure each of your programs contains your name in the comment section. You must place both your source codes (programs) and your executables in your personal dropbox. Again, follow the guidelines given in class. Use the file naming convention introduced in hw1. Make sure you use the g++ compiler.