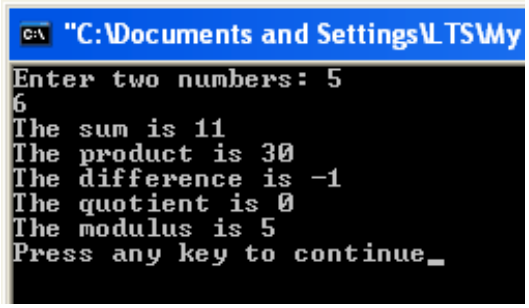
DAT8921 Lab 3

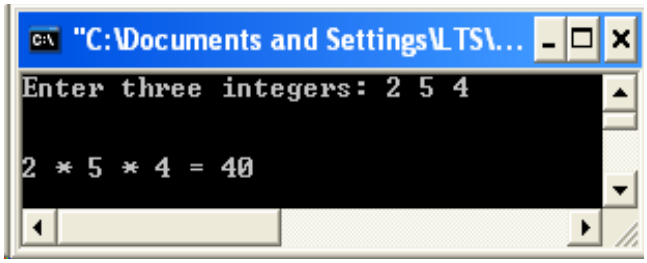
1. Write a C++ program that prompts a user to enter two numbers, obtains the two numbers from the user and prints the sum, product, difference, quotient and remainder of the two numbers. Your output should look something like as follows:



2. Write a program that will prompt a user for three integers, and then print out the product of the three integers.

   Use the following algorithm:

   1. Declare the integer variables **x**, **y** and **z** (i.e. int x;).
   2. Prompt user for the three integer values using a cout statement
   3. Read the three integer values into memory using a cin statement
   4. Print out the result using a cout statement ***(10 marks)***

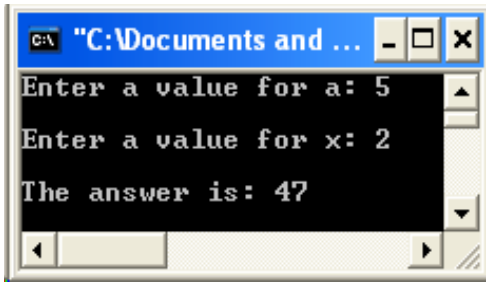


3. Using the equation $y = ax^3 + 7$, write a program that prompts a user for the **a** value and the **x** value, and then calculates and prints out the answer for **y** to the screen. Include the math library "cmath"so that you can calculate the x^3 term using the pow() function.

(hint - be certain to write #include <cmath> as well as the #include <iostream> library).

Use the following algorithm:

1. Declare the variables **a**, **x** and **y**.
2. Prompt user for the **a** value using a cout statement
3. Read the **a** value into memory using a cin statement
4. Prompt user for the **x** value using a cout statement
5. Read the **x** value into memory using a cin statement.
6. Calculate **y**
7. Print out **y** to the monitor. ***(10 marks)***



4. Write a program that calculates the squares and cubes of the numbers from 0 to 10 and uses tabs to print the following table of values: