Due:10/08/20

## Simple C++ program for polynomial arithmetic

**You need to implement this program using either Linked list or vector**

Write a program in  C++  to input pairs of polynomials and output:
1. Output them in **canonical form**. Then compute and output:
2. Their sum (add them)
 3. Their difference (subtract them)
4. Their product (multiply them).

The input:
Read the input from a file called input.txt in the same directory as your program. Each line (terminated by a newline character) in the file will represent a polynomial. The line will contain a list of integers, which when taken in pairs, will represent the coefficient and exponent of each of the terms in the polynomial.

Processing and output: You will process each pair of lines, representing two polynomials and will:
1. Output them first as they appear in the file and then in canonical form. Then compute and output, all in canonical form:
2. Their sum (add them)
3. Their difference (subtract them)
4. Their product (multiply them).

Output them to a file in your program's directory called output.txt