CPSC 6810: Mod 4
Graded Exercise 3: Simple polynomial class
10 points

Create a class **PosPoly** that stores polynomials in x with positive integer coefficients.
For example, $4x^5 + 2x^6 + 3x^2 + x$.

The instance variables of your class should be (a) a counter for the number of powers; and (b) a vector of **`Pair`**s , where a **`Pair`** is a struct (or a class) that stores two ints: the power and the coefficient. The powers should be in the order they were first added. For example, the above polynomial should be stored as:

entryCount = 4

power	5	6	2	1	. . .
coeff	4	2	3	1	. . .

The class should be stored in files `PosPoly.cpp` and `PosPoly.h`. A Pair class (Pair.h, Pair.cpp). You may adapt these as needed for use in this exercise.

Your PosPoly class should have the following methods:

- A default constructor that initializes the polynomial to zero
- void incrementBy(int c, int p): increments the current polynomial by cx^p, where both c and and p are positive.
- An overloaded << operator for output (e.g. 4x^5 + 2x^6 + 3x^2 + 1x^1 for the above example).
- A boolean test for whether two polynomials are equal.

For example:

```
PosPoly A;
A.incrementBy(1,5);
A.incrementBy(2,6);
A.incrementBy(3,2);
A.incrementBy(3,5);
A.incrementBy(1,1);
```
should produce the above example polynomial.

A PosPolyTest.cpp and Pair class files will be provided. Submit via Canvas. You may work solo or in pairs. If working in pairs, only one member of the pair should submit. Place the name of the pair partner in a README file.