CS-182
Lab #4
Vectors and Sorting

Date: Wednesday, January 10th, 2001
Due: Thursday, January 18th, 2001

Bubble sorting is a simplistic method for sorting small arrays (or vectors) of numbers. The purpose of this assignment is to demonstrate the bubble sorting technique on a vector of 20 numbers. The bubble sorting process itself will be described in class (because it is fairly lengthy to do here!).

The program should print out the contents of the vector after each pass of the array is made. This way the "bubbling" process can be observed.

Your data output (i.e. the contents of your array after each pass) should look as follows:

```
Data:   20 19 18 17 16 15 14 13 12 11 10  9  8  7  6  5  4  3  2  1

Pass 1: 19 18 17 16 15 14 13 12 11 10  9  8  7  6  5  4  3  2  1 20

Pass 2: 18 17 16 15 14 13 12 11 10  9  8  7  6  5  4  3  2  1 19 20

 .
 .
 .
```

Implement the program as a set of functions: main(), sort(), and swap(). Each function should only communicate by passing parameters (i.e. no global variables allowed).