In this exercise we study basics of C++ iterators and algorithms.

Excercise A (2p) Simple sorting

Write a program that defines a vector of double. The program asks user to enter numbers and stores the numbers in the vector. The program stops asking numbers when user enter a negative number. The negative number is not stored the vector.

When program has finished asking numbers it sorts the numbers. After sorting the program prints the numbers on separate lines with 3 decimal precision.

Iomanipulators can be used to change formatting of output (and input) streams. See http://www.cplusplus.com/reference/iomanip/setprecision/ for an example.

Excercise B (2p) Parameter passing and more algorithms

Write a function called *backwards* that takes a **reference** to a vector of strings as a parameter. The function reverses all strings in the vector and then sorts the vector in descending order. Hint: algorithms: sort, reverse

Write a program that reads strings from the keyboard. There is no upper limit for the number of strings. All strings are stored in a vector of strings. The data entry phase terminates when the user enters the "stop" string. This termination string is not stored in the vector.

When all strings have been entered the program prints the vector elements on separate lines. Then program calls backwards and passes the vector as parameter. After the call the program prints the vector again.

For example:
If original content of the vector is:

```
acb
Doom
Beast
option
dentax
```

After calling backwards the vector contains:

```
xatned
tsaeB
noitpo
mooD
bca
```