Lab 4. Constructors

Write a class in C++ that has the following definition:

```
class Sort
{
   // add data members
public:
   // add constuctors
   void InsertSort(bool reverse=false);
   void QuickSort(bool reverse=false);
   void BubbleSort(bool reverse=false);
   void Print();
   int  GetElementsCount();
   int  GetElementFromIndex(int index);
}
```

Organize the code in the following way:

- a header file called **Sort.h**
- a cpp file called **Sort.cpp** that contains the source code for class **Sort**
- a main file called **main.cpp** that contains the main function and has an example on how to use **Sort**. The example must include using all methods from the class.
- add several constructors that will allow the following:
  - create the list that needs to be sorted out of random values within a specific interval (min , max)
  - create the list that needs to be sorted from an initialization list
  - create the list that needs to be sorted from an existing vector (the constructor will have two parameters - one being the vector, the other one being the number of elements from the vector)
  - create the list that needs to be sorted using variadic parameters (use va_args for this)
  - create the list that needs to be sorted from a string (e.g. "10,40,100,5,70" -> each number is separated from the rest of the number with a comma). It is assume that the string is correctly written (no space, only numerical characters and commas)