Exercise

(1) Create files biginteger.h and biginteger.cpp to declare and implement a class called **BigInteger**

The only (private) attribute of this class will be a std::vector<char> _v for storing digits.

For example, $_{v} = ['9', '9', '9', '9', '9', '9']$ represents the number 999 999.

- (2) Overload operator + for sum between two **BigInteger** objects. (Optional: also overload +=)
- (3) Overload operator >> for reading a **BigInteger** object.
- (4) Overload operator << for printing a **BigInteger** object.
- (5) Overload operator < for comparing two **BigInteger** objects.
- (6) Test your class as follows, in a main.cpp file:
- Read 10 BigInteger objects (with >>) and put them in a vector std::vector <BigInteger > bigs;
- Sort the vector bigs calling std::sort function from #include<algorithm>
- Print all elements inside the vector bigs (with <<)
- Sum all the elements of the vector bigs and print the result.