

6. No Loops

In the directory `NoLoops`, you need to write the `implementation.cpp` and `header.hpp` files for the following functions. Please add a `main` function to your `implementation.cpp` file and use a debugger if you encounter runtime bugs.



None of your code for this problem can use the `for` or `while` keywords. You also aren't allowed to use the `std::for_each` algorithm. This constraint is to motivate you to learn and use the algorithms in `<algorithm>` and `<numeric>`. Please be sure that any comments also don't have those words. If such a word must appear in your code (for example in a citation or comment), insert an interrupting space. Example <https://stackoverflow.com/questions/11738939/never-seen-before-c-for-loop> should be changed to <https://stackoverflow.com/questions/11738939/never-seen-before-c-fo r-loop>.

The submit button is pretty slow on these test cases. Make sure you use the terminal and local testing instead of relying on submission to check your code.

Sort By Uppercase

You need to write a void function named `SortByUppercase` that takes a vector (of strings) and sorts them according to only the uppercase letters in them. Be sure to preserve the original order of the vector for words that have the same uppercase letters in them (look into stable sorts).

Example:



```
std::vector<std::string> words = {"wolf", "BanAna", "caRRot", "AprIcots", "BEets",  
std::vector<std::string> expected = {"wolf", "apple", "orAngEs", "AprIcots", "BanAr  
SortByUppercase(words);  
CHECK(words == expected);  
// Note that "wolf" comes before "apple"
```