

# Lab 08 - Arrays & Maps Problems

**Direction:** Submit typed work in the Labs directory of your github repositor or dropbox, or upload to the google classroom assignment. Each part will have a template file provided named "lab8A.cpp" and "lab8B.cpp" respectively.

## Part A: In class

Your objective is to write the definition of the function `GCD()` whose header is

```
ulong GCD(Vector<ulong>& data)
```

It returns the greatest common divisors of the elements of *data* where the greatest common divisor is the greatest number that can divide all the elements evenly. If *data* is empty, it returns 0. You can only use functions you define to help define `GCD()`.

## Part B: Take home

Your objective is to write the definition of the function `Frequency()` whose header is

```
void Frequency(istream& in)
```

It displays the frequency of each letter in any case in the file referenced by *in*. If *in* is not open, it displays nothing.