

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 `Mode()` whose header is

```
double Mode(Vector<double>& data)
```

It returns the mode of the elements of *data* where the mode is the value that appears the most times. If *data* is empty or *data* does not have a mode, it returns 0.