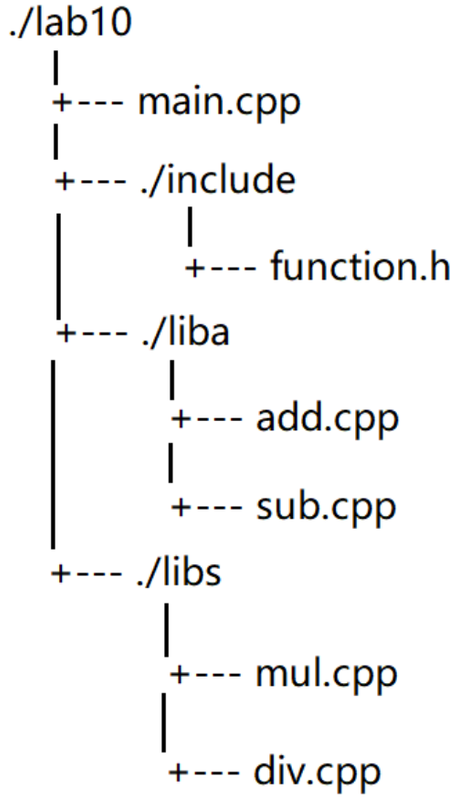
3 Exercises

1.Define four functions that implement the operations of addition, subtraction, multiplication and division respectively.(one function one .cpp file) Write a test program to test these functions.



According to the tree structure of the files, creates a static library with the two files in the liba directory and a dynamic library with two files in the libs directory. And then link with main.cpp. Using cmake command to compile and build your project. At last run the program.

2. Write a three-file program based on the following namespace:

```
namespace SALES
{
    const int QUATERS = 4;
    struct Sales
    {
        double sales[QUATERS];
        double average;
        double max;
        double min;
    };

    // copies n items from the array ar to the sales member of s and
    // computes and stores the average, maximum and minimum values
    // of the entered items.
    void setSales(Sales& s, const double ar[], int n = 4);

    // display all information in the sales s
    void showSales(const Sales& s, int n = 4);
}
```

The **first file** should be a header file that contains the namespace. The **second file** should be a source code file that extends the namespace to provide definitions for the two prototyped functions. The **third file** should define a **Sales object**. It should use setSales() to provide values for the structure. And then it should display the contents of the structure by using showSales().

A sample runs might look like this:

```
Input n:3
Please input 3 double values:123.5 9087.6 3452.1
Sales:123.5 9087.6 3452.1
Average:4221.07
Max:9087.6
Min:123.5
```

```
Input n:5
n is not correct.
Aborted
```