## Compilation

```
jamess-imac:program AcousticTime$ g++ -c ClassInfo.cpp
jamess-imac:program AcousticTime$ g++ -c Counter.cpp
jamess-imac:program AcousticTime$ g++ -o program3a program3a.cpp ClassInfo.o Counter.o
```

## Program 1B

```
jamess-imac:Program2A AcousticTime$ ./program3a
Enter the file name to count lines from: program1b.cpp

Program Name: program1b

Class Name: Input
Method Count: 3
Class Line Count: 51

program1b Master Count: 76
```

## Program 2A

```
jamess-imac:Program2A AcousticTime$ ./program3a
Enter the file name to count lines from: program2a.cpp

Program Name: program2a

Class Name: Counter
Method Count: 2
Class Line Count: 33

program2a Master Count: 46
```

## Program 3A

```
jamess-imac:program AcousticTime$ ./program3a
Enter the file name to count lines from: program3a.cpp

Program Name: program3a

Class Name: Counter
Method Count: 6
Class Line Count: 138

Class Name: ClassInfo
Method Count: 4
Class Line Count: 37

program3a Master Count: 189
```

## Results Table

| Program # | Object Name | # of Methods | Object LOC | Total Prog LOC |
|---|---|---|---|---|
| 1B | Input | 3 | 51 | |
| | | | | 76 |
| 2A | Counter | 2 | 33 | |
| | | | | 46 |
| 3A | Counter | 6 | 138 | |
| | ClassInfo | 4 | 37 | |
| | | | | 189 |
| | | | | |

## Pseudo Code

**Main Program**

create Count object
pass it program filename
count method called
display report

**Count Lines Method - Recursive**

create new ClassInfo Object
    add name of current class to object – extension
count lines and store result in ClassInfo Object
count methods and store result in ClassInfo Object
add ClassInfo object to vector
search for classes and store each name in local vector
for each class found,
    run count lines method with new name which repeats above recursively