Compilation

```
jamess-imac:program AcousticTime$ g++ -c Input.cpp
jamess-imac:program AcousticTime$ g++ -c StringToFloat.cpp
jamess-imac:program AcousticTime$ g++ -c FileCheck.cpp
jamess-imac:program AcousticTime$ g++ -o program4b program4b.cpp Input.o
StringToFloat.o FileCheck.o
```

Test 1

```
jamess-imac:program AcousticTime$ ./program4b
What would you like to do?
Enter 1 to read from file.
Enter 2 to write to file.
Enter 3 to modify a file.
Enter 0 to quit.
Choice: 1
Enter the file name to access: notthere

The filename doesn't exist
What would you like to enter a new filename?
Enter 1 to enter another filename.
Enter 0 to quit.
Choice: 1
Enter the file name to access: test1
1
2
3
4
5
jamess-imac:program AcousticTime$
```

Test 2

```
jamess-imac:program AcousticTime$ ./program4b
What would you like to do?
Enter 1 to read from file.
Enter 2 to write to file.
Enter 3 to modify a file.
Enter 0 to quit.
Choice: 2
Enter the file name to access: test2

The filename already exists
What would you like to enter a new filename?
Enter 1 to enter another filename.
Enter 0 to quit.
Choice: 1
Enter the file name to access: test2b
Enter the amount of numbers to write: 5
Enter number 1: 1
```
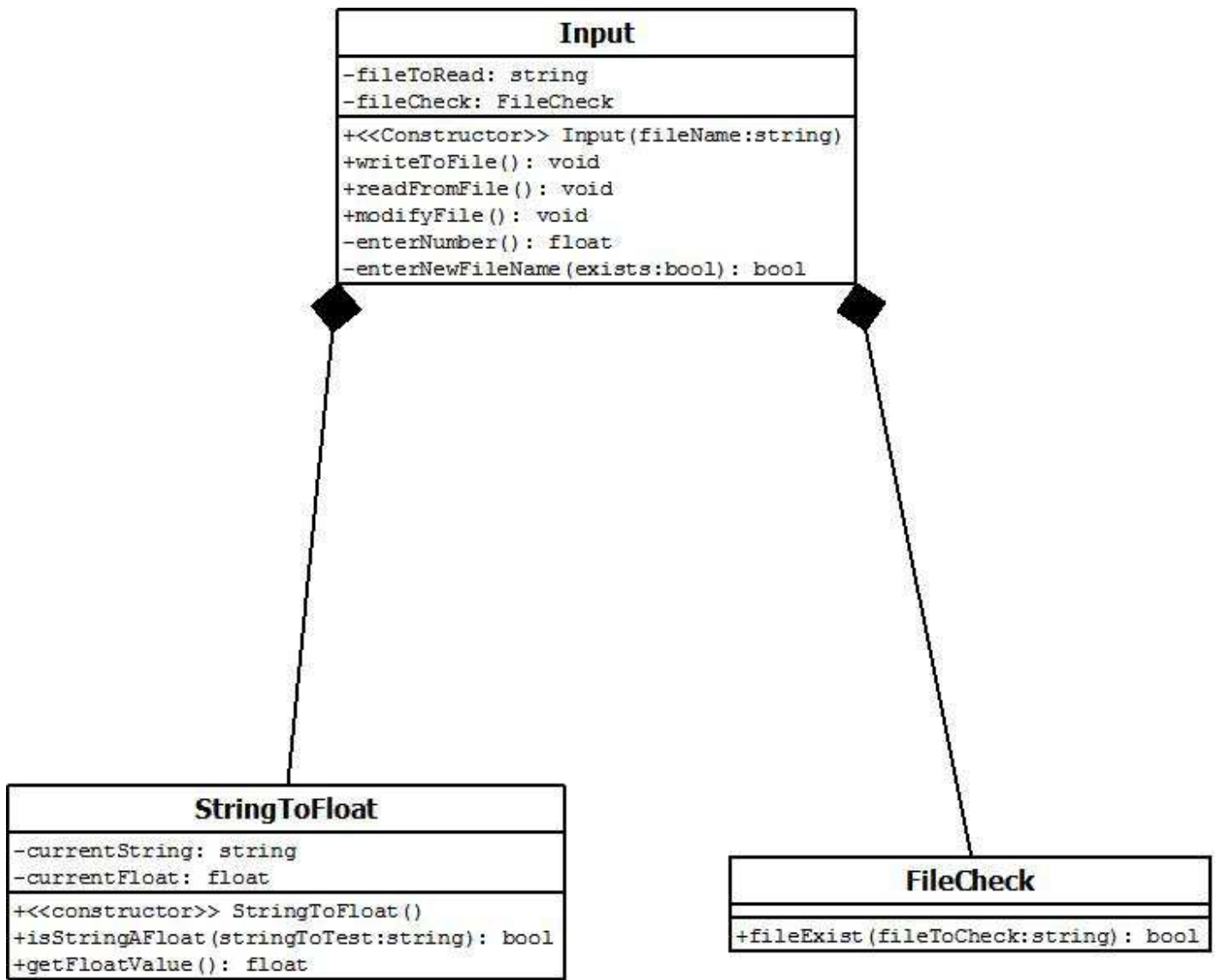
```
Enter number 2: 2
Enter number 3: 3
Enter number 4: 4
Enter number 5: 5
jamess-imac:program AcousticTime$
```

Test 3

```
jamess-imac:program AcousticTime$ ./program4b
What would you like to do?
Enter 1 to read from file.
Enter 2 to write to file.
Enter 3 to modify a file.
Enter 0 to quit.
Choice: 3
Enter the file name to access: test3

The filename doesn't exist
What would you like to enter a new filename?
Enter 1 to enter another filename.
Enter 0 to quit.
Choice: 0
jamess-imac:program AcousticTime$
```

UML Class Diagram

Input

-fileToRead: string
-fileCheck: FileCheck

+<<Constructor>> Input(fileName:string)
+writeToFile(): void
+readFromFile(): void
+modifyFile(): void
-enterNumber(): float
-enterNewFileName(exists:bool): bool

StringToFloat

-currentString: string
-currentFloat: float

+<<constructor>> StringToFloat()
+isStringAFloat(stringToTest:string): bool
+getFloatValue(): float

FileCheck

+fileExist(fileToCheck:string): bool

UML Use Case Diagram