

Compilation

```
james-iac:program AcousticTime$ g++ -c Input.cpp
james-iac:program AcousticTime$ g++ -o program2b program2b.cpp
Input.o
james-iac:program AcousticTime$
```

Test 1

```
james-iac:program AcousticTime$ ./program2b
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: test1
Enter the amount of numbers to write: 10
Enter number 1: 160
Enter number 2: 591
Enter number 3: 114
Enter number 4: 229
Enter number 5: 230
Enter number 6: 270
Enter number 7: 128
Enter number 8: 1657
Enter number 9: 624
Enter number 10: 1503
james-iac:program AcousticTime$ ./program2b
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: test1

What would you like to do with this number, 160?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 186

What would you like to do with this number, 591?
```

Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 699

What would you like to do with this number, 114?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 132

What would you like to do with this number, 229?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 272

What would you like to do with this number, 230?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 291

What would you like to do with this number, 270?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 331

What would you like to do with this number, 128?

Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 199

What would you like to do with this number, 1657?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 1890

What would you like to do with this number, 624?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 788

What would you like to do with this number, 1503?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 1601

Would you like to replace the current file or create a new file?
Enter 1 to replace the current file's contents.
Enter 2 to create a new file.
Choice: 1

james-@imac:program AcousticTime\$./program2b
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: test1

What would you like to do with this number, 186?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 4

Enter number: 15.0

What would you like to do with this number, 699?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 4

Enter number: 69.9

What would you like to do with this number, 132?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 4

Enter number: 6.5

What would you like to do with this number, 272?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 4

Enter number: 22.4

What would you like to do with this number, 291?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 4

Enter number: 28.4

What would you like to do with this number, 331?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 4

Enter number: 65.9

What would you like to do with this number, 199?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 4

Enter number: 19.4

What would you like to do with this number, 1890?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 4

Enter number: 198.7

What would you like to do with this number, 788?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 4

Enter number: 38.8

What would you like to do with this number, 1601?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 4

Enter number: 138.2

Would you like to replace the current file or create a new file?

Enter 1 to replace the current file's contents.

Enter 2 to create a new file.

Choice: 1

jameess-imac:program AcousticTime\$./program2b

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: test1

What would you like to do with this number, 186?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 3

What would you like to do with this number, 15?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 1

What would you like to do with this number, 699?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 3

What would you like to do with this number, 69.9?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 1

What would you like to do with this number, 132?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 6.5?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 1

What would you like to do with this number, 272?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 22.4?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 1

What would you like to do with this number, 291?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 28.4?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 1

What would you like to do with this number, 331?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 65.9?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 1

What would you like to do with this number, 199?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 19.4?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 1

What would you like to do with this number, 1890?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 198.7?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 1

What would you like to do with this number, 788?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 38.8?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 1

What would you like to do with this number, 1601?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 138.2?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 1

Would you like to replace the current file or create a new file?
Enter 1 to replace the current file's contents.
Enter 2 to create a new file.
Choice: 1

james-imac:program AcousticTime\$./program2b

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: test1
15
69.9
6.5
22.4
28.4
65.9
19.4
198.7
38.8
138.2

Test 2

```
james-imac:program AcousticTime$ ./program2b
```

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

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

```
james-imac:program AcousticTime$ ./program2b
```

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: test2

What would you like to do with this number, 1?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 2

Enter number: 101

What would you like to do with this number, 2?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.

Choice: 2

Enter number: 102

What would you like to do with this number, 3?

Enter 1 to accept this number.

Enter 2 to replace this number.

Enter 3 to delete this number.

Enter 4 to insert a new number after current number.

Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 103

What would you like to do with this number, 4?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 104

What would you like to do with this number, 5?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 2

Enter number: 105

Would you like to replace the current file or create a new file?
Enter 1 to replace the current file's contents.
Enter 2 to create a new file.
Choice: 1
jameess-imac:program AcousticTime\$./program2b
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: test2

What would you like to do with this number, 101?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 102?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.

Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 1

What would you like to do with this number, 103?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 104?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 1

What would you like to do with this number, 105?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

Would you like to replace the current file or create a new file?
Enter 1 to replace the current file's contents.
Enter 2 to create a new file.
Choice: 2
Enter the file name to access: newtest2
jameess-imac:program AcousticTime\$./program2b
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: newtest2
102
104

Test 3

```
jameess-imac:program AcousticTime$ ./program2b
```

```
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: test3
```

```
Enter the amount of numbers to write: 10
```

```
Enter number 1: 1
```

```
Enter number 2: 2
```

```
Enter number 3: 3
```

```
Enter number 4: 4
```

```
Enter number 5: 5
```

```
Enter number 6: 6
```

```
Enter number 7: 7
```

```
Enter number 8: 8
```

```
Enter number 9: 9
```

```
Enter number 10: 10
```

```
jameess-imac:program AcousticTime$ ./program2b
```

```
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
```

```
What would you like to do with this number, 1?
```

```
Enter 1 to accept this number.
```

```
Enter 2 to replace this number.
```

```
Enter 3 to delete this number.
```

```
Enter 4 to insert a new number after current number.
```

```
Enter 5 to accept the remainder of the numbers.
```

```
Choice: 1
```

```
What would you like to do with this number, 2?
```

```
Enter 1 to accept this number.
```

```
Enter 2 to replace this number.
```

```
Enter 3 to delete this number.
```

```
Enter 4 to insert a new number after current number.
```

```
Enter 5 to accept the remainder of the numbers.
```

```
Choice: 1
```

```
What would you like to do with this number, 3?
```

```
Enter 1 to accept this number.
```

Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 4?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 3

What would you like to do with this number, 5?
Enter 1 to accept this number.
Enter 2 to replace this number.
Enter 3 to delete this number.
Enter 4 to insert a new number after current number.
Enter 5 to accept the remainder of the numbers.
Choice: 5

Would you like to replace the current file or create a new file?
Enter 1 to replace the current file's contents.
Enter 2 to create a new file.
Choice: 1

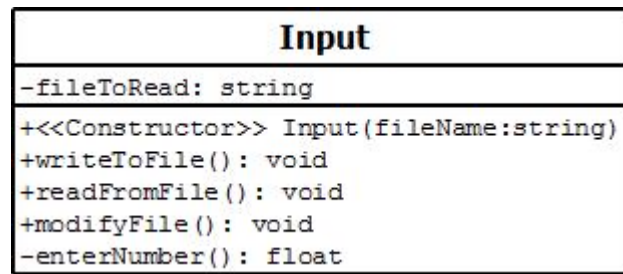
james-imac:program AcousticTime\$./program2b

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: test3

1
2
5
6
7
8
9
10

UML Class Diagram



UML Use Case Diagram

