

COMSC-165

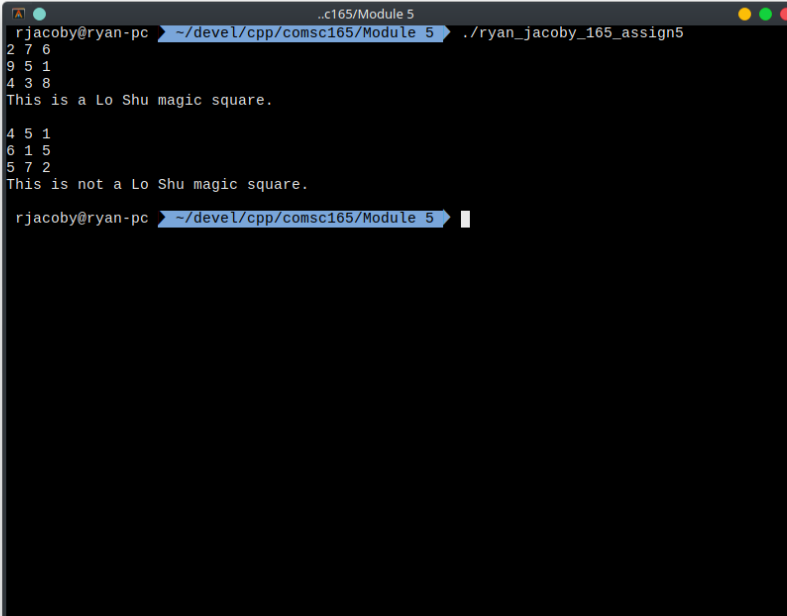
Programming Assignment 5

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I forgot to include the screenshots of all of my runs in the first submission; there are here in this revised version.

Run 1



```
..c165/Module 5
rjacoby@ryan-pc ~/devel/cpp/comsc165/Module 5: ./ryan_jacoby_165_assign5
2 7 6
9 5 1
4 3 8
This is a Lo Shu magic square.
4 5 1
6 1 5
5 7 2
This is not a Lo Shu magic square.
rjacoby@ryan-pc ~/devel/cpp/comsc165/Module 5
```

Run 2

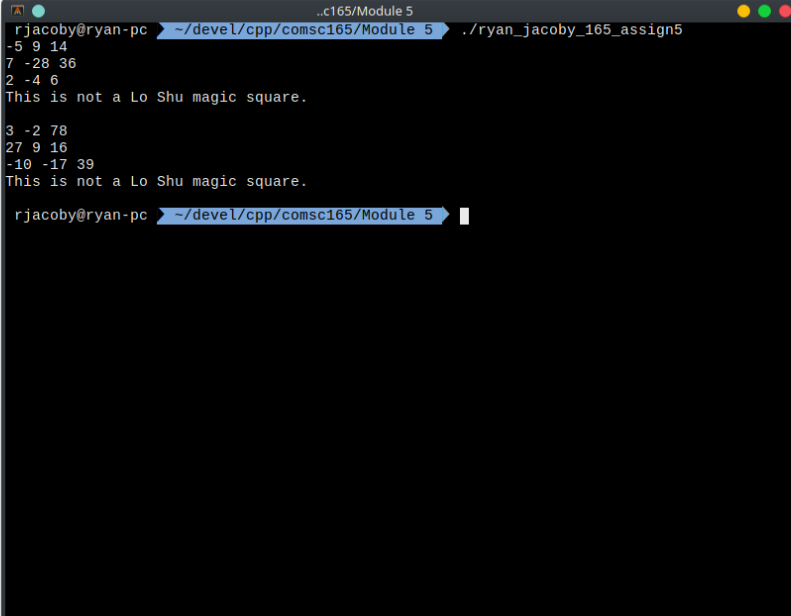
A terminal window titled '..c165/Module 5' with standard macOS window controls. The prompt is 'rjacoby@ryan-pc'. The user enters the command '~/devel/cpp/comsc165/Module 5' followed by a right arrow, then './ryan_jacoby_165_assign5'. The program outputs a 3x3 grid of numbers: 2 7 6, 9 5 1, 4 3 8. Below the grid, it prints 'This is not a Lo Shu magic square.' The user enters another right arrow. The program outputs the same 3x3 grid: 4 3 8, 9 5 1, 2 7 6. Below the grid, it prints 'This is a Lo Shu magic square.' The user enters another right arrow. The prompt returns to 'rjacoby@ryan-pc' with a right arrow and a cursor.

```
..c165/Module 5
rjacoby@ryan-pc ~/devel/cpp/comsc165/Module 5 ➤ ./ryan_jacoby_165_assign5
2 7 6
9 5 1
4 3 8
This is not a Lo Shu magic square.

4 3 8
9 5 1
2 7 6
This is a Lo Shu magic square.

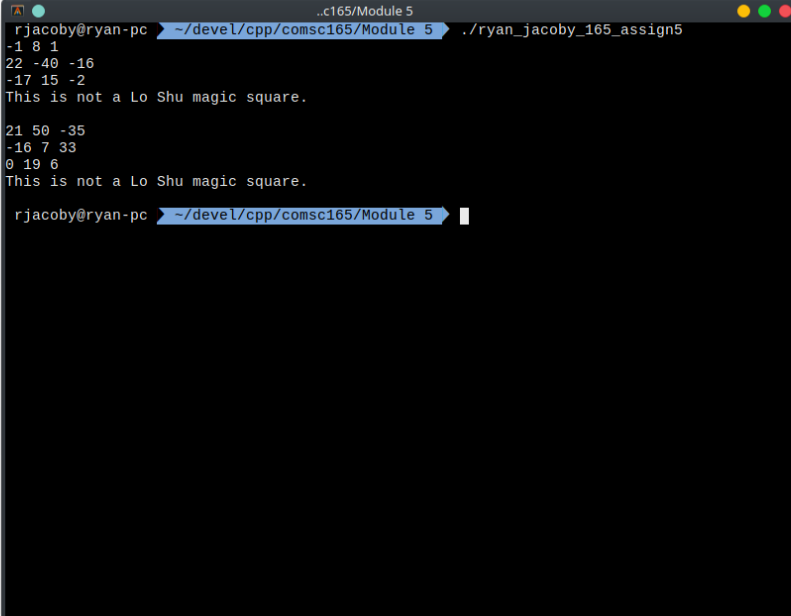
rjacoby@ryan-pc ~/devel/cpp/comsc165/Module 5 ➤
```

Run 3

A terminal window titled '..c165/Module 5' with standard macOS window controls. The prompt is 'rjacoby@ryan-pc' and the current directory is '~/devel/cpp/comsc165/Module 5'. The user has executed './ryan_jacoby_165_assign5'. The program outputs two 3x3 matrices. The first matrix is [-5, 9, 14; 7, -28, 36; 2, -4, 6] and the program outputs 'This is not a Lo Shu magic square.' The second matrix is [3, -2, 78; 27, 9, 16; -10, -17, 39] and the program also outputs 'This is not a Lo Shu magic square.' The prompt is now ready for the next command.

```
..c165/Module 5
rjacoby@ryan-pc ~/devel/cpp/comsc165/Module 5 ./ryan_jacoby_165_assign5
-5 9 14
7 -28 36
2 -4 6
This is not a Lo Shu magic square.
3 -2 78
27 9 16
-10 -17 39
This is not a Lo Shu magic square.
rjacoby@ryan-pc ~/devel/cpp/comsc165/Module 5
```

Run 4

A terminal window titled '..c165/Module 5' with standard macOS window controls. The prompt is 'rjacoby@ryan-pc' and the current directory is '~/devel/cpp/comsc165/Module 5'. The user has executed './ryan_jacoby_165_assign5'. The program outputs three 3x3 matrices. The first matrix is [[1, 8, 1], [22, -40, -16], [-17, 15, -2]] and the second is [[21, 50, -35], [-16, 7, 33], [0, 19, 6]]. Both are followed by the message 'This is not a Lo Shu magic square.' The terminal ends with the prompt 'rjacoby@ryan-pc' and the directory path.

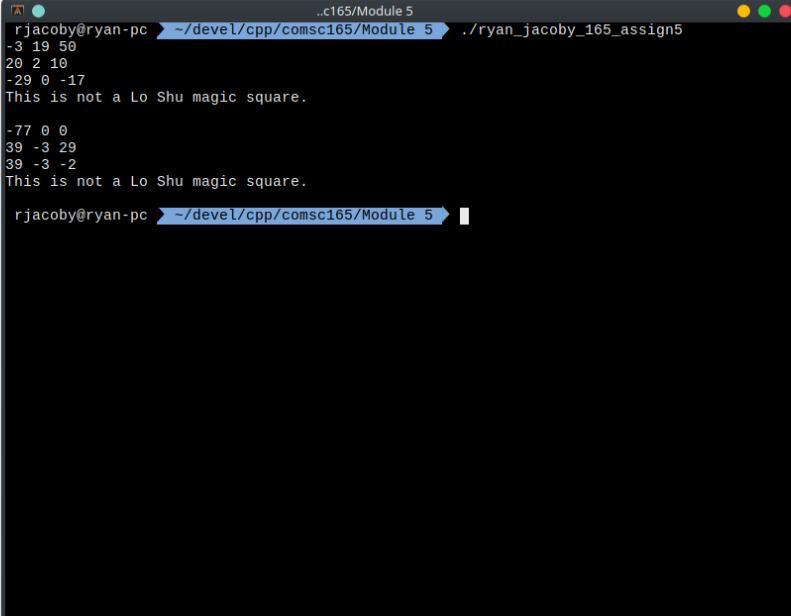
```

..c165/Module 5
rjacoby@ryan-pc ~/devel/cpp/comsc165/Module 5$ ./ryan_jacoby_165_assign5
1 8 1
22 -40 -16
-17 15 -2
This is not a Lo Shu magic square.

21 50 -35
-16 7 33
0 19 6
This is not a Lo Shu magic square.

rjacoby@ryan-pc ~/devel/cpp/comsc165/Module 5$
```

Run 5



```
..c165/Module 5
rjacoby@ryan-pc ~/devel/cpp/comsc165/Module 5: ./ryan_jacoby_165_assign5
-3 19 50
20 2 10
-29 0 -17
This is not a Lo Shu magic square.
-77 0 0
39 -3 29
39 -3 -2
This is not a Lo Shu magic square.
rjacoby@ryan-pc ~/devel/cpp/comsc165/Module 5
```