```
Python 3.12.0 (v3.12.0:0fb18b02c8, Oct  2 2023, 09:45:56) [Clang
13.0.0 (clang-1300.0.29.30)] on darwin
Type "help", "copyright", "credits" or "license()" for more
information.

==== RESTART: /Users/jreid/Documents/JLR_dev_code/merrimack/CSC6013/
test.py ====

Jesse Reid CSC6013 Coding Project 2


Running P#2 problem #1 P2_1.py

Please input an integer value for the array. Press enter when finished
filling array. 20
Array = [20]
Please input an integer value for the array. Press enter when finished
filling array. 21
Array = [20, 21]
Please input an integer value for the array. Press enter when finished
filling array. 25
Array = [20, 21, 25]
Please input an integer value for the array. Press enter when finished
filling array. 28
Array = [20, 21, 25, 28]
Please input an integer value for the array. Press enter when finished
filling array. 33
Array = [20, 21, 25, 28, 33]
Please input an integer value for the array. Press enter when finished
filling array. 34
Array = [20, 21, 25, 28, 33, 34]
Please input an integer value for the array. Press enter when finished
filling array. 35
Array = [20, 21, 25, 28, 33, 34, 35]
Please input an integer value for the array. Press enter when finished
filling array. 36
Array = [20, 21, 25, 28, 33, 34, 35, 36]
Please input an integer value for the array. Press enter when finished
filling array. 41
Array = [20, 21, 25, 28, 33, 34, 35, 36, 41]
Please input an integer value for the array. Press enter when finished
filling array. 42
Array = [20, 21, 25, 28, 33, 34, 35, 36, 41, 42]
Please input an integer value for the array. Press enter when finished
filling array.
Complete array = [20, 21, 25, 28, 33, 34, 35, 36, 41, 42]
Please input an integer to divide by. 7
The number of entries in [20, 21, 25, 28, 33, 34, 35, 36, 41, 42]
divisible by 7 is 4.
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```
Please input an integer value for the array. Press enter when finished
filling array. 18
Array = [18]
Please input an integer value for the array. Press enter when finished
filling array. 54
Array = [18, 54]
Please input an integer value for the array. Press enter when finished
filling array. 76
Array = [18, 54, 76]
Please input an integer value for the array. Press enter when finished
filling array. 81
Array = [18, 54, 76, 81]
Please input an integer value for the array. Press enter when finished
filling array. 36
Array = [18, 54, 76, 81, 36]
Please input an integer value for the array. Press enter when finished
filling array. 48
Array = [18, 54, 76, 81, 36, 48]
Please input an integer value for the array. Press enter when finished
filling array. 99
Array = [18, 54, 76, 81, 36, 48, 99]
Please input an integer value for the array. Press enter when finished
filling array.
Complete array = [18, 54, 76, 81, 36, 48, 99]
Please input an integer to divide by. 9
The number of entries in [18, 54, 76, 81, 36, 48, 99] divisible by 9
is 5.


Running P#2 problem #2 P2_2.py

Please input a value for the array. Press enter when finished filling
array. 50
Array = [50]
Please input a value for the array. Press enter when finished filling
array. 120
Array = [50, 120]
Please input a value for the array. Press enter when finished filling
array. 250
Array = [50, 120, 250]
Please input a value for the array. Press enter when finished filling
array. 100
Array = [50, 120, 250, 100]
Please input a value for the array. Press enter when finished filling
array. 20
Array = [50, 120, 250, 100, 20]
Please input a value for the array. Press enter when finished filling
array. 300
Array = [50, 120, 250, 100, 20, 300]
Please input a value for the array. Press enter when finished filling
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array. 200
Array = [50, 120, 250, 100, 20, 300, 200]
Please input a value for the array. Press enter when finished filling
array.
Complete array = [50, 120, 250, 100, 20, 300, 200]
The smallest distance between any two numbers in [50, 120, 250, 100,
20, 300, 200] is 20

Please input a value for the array. Press enter when finished filling
array. 12.4
Array = [12.4]
Please input a value for the array. Press enter when finished filling
array. 45.9
Array = [12.4, 45.9]
Please input a value for the array. Press enter when finished filling
array. 8.1
Array = [12.4, 45.9, 8.1]
Please input a value for the array. Press enter when finished filling
array. 79.8
Array = [12.4, 45.9, 8.1, 79.8]
Please input a value for the array. Press enter when finished filling
array. -13.64
Array = [12.4, 45.9, 8.1, 79.8, -13.64]
Please input a value for the array. Press enter when finished filling
array. 5.09
Array = [12.4, 45.9, 8.1, 79.8, -13.64, 5.09]
Please input a value for the array. Press enter when finished filling
array.
Complete array = [12.4, 45.9, 8.1, 79.8, -13.64, 5.09]
The smallest distance between any two numbers in [12.4, 45.9, 8.1,
79.8, -13.64, 5.09] is 3.01


Running P#2 problem #3 P2_3.py

What is the size of the square matrix? 2
Please input a matrix value for matrix A: 2
Please input a matrix value for matrix A: 7
Row complete
Please input a matrix value for matrix A: 3
Please input a matrix value for matrix A: 5
Row complete
Please input a matrix value for matrix B: 8
Please input a matrix value for matrix B: -4
Row complete
Please input a matrix value for matrix B: 6
Please input a matrix value for matrix B: 6
Row complete
Array A:
[[2 7]
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```
 [3 5]]
multiplied by Array B:
[[ 8 -4]
 [ 6  6]]
Result:
[[58 34]
 [54 18]]
What is the size of the square matrix? 3
Please input a matrix value for matrix A: 1
Please input a matrix value for matrix A: 0
Please input a matrix value for matrix A: 2
Row complete
Please input a matrix value for matrix A: 3
Please input a matrix value for matrix A: -2
Please input a matrix value for matrix A: 5
Row complete
Please input a matrix value for matrix A: 6
Please input a matrix value for matrix A: 2
Please input a matrix value for matrix A: -3
Row complete
Please input a matrix value for matrix B: .3
Please input a matrix value for matrix B: .25
Please input a matrix value for matrix B: .1
Row complete
Please input a matrix value for matrix B: .4
Please input a matrix value for matrix B: .8
Please input a matrix value for matrix B: 0
Row complete
Please input a matrix value for matrix B: -.5
Please input a matrix value for matrix B: .75
Please input a matrix value for matrix B: .6
Row complete
Array A:
[[ 1  0  2]
 [ 3 -2  5]
 [ 6  2 -3]]
multiplied by Array B:
[[ 0.3   0.25  0.1 ]
 [ 0.4   0.8   0.  ]
 [-0.5   0.75  0.6 ]]
Result:
[[-0.7   1.75  1.3 ]
 [-2.4   2.9   3.3 ]
 [ 4.1   0.85 -1.2 ]]
```