```
Compiler is using classPath = '[C:\Users\ezeha\OneDrive\Documents\Development\Java\Projects\COSC237-Assignments\Assignment2\Matrix, C:\Users\ezeha\Downloads\drjava-beta-20190813-220051.jar]';  bootClassPath = 'null'
Enter the size of the square matrix: 5
Your options are:
-----------------
1) Add 2 matricies
2) Subtract 2 matricies
3) Multiply 2 matricies
4) Multiply matrix by a constant
5) Transpose matrix
6) Matrix trace
7) Make a copy
8) Test for equality
0) EXIT
Please enter your option: 1

First Matrix is:
    5    2    4    7    2
    5    6    2    4    9
    8   10    4    9    4
    3    6   10    1    9
    5   10    2    5    7
First Matrix is:
    3    6    2    5    7
    1    1    7    4    4
    8   10    4    5    1
    8    4    7    1    2
   10    8    3    3    7
The resulting matrix is:
    8    8    6   12    9
    6    7    9    8   13
   16   20    8   14    5
   11   10   17    2   11
   15   18    5    8   14

Command number 1 completed

Your options are:
-----------------
1) Add 2 matricies
2) Subtract 2 matricies
3) Multiply 2 matricies
4) Multiply matrix by a constant
5) Transpose matrix
6) Matrix trace
7) Make a copy
8) Test for equality
0) EXIT
Please enter your option: 2

First Matrix is:
    2    1    5    8    7
    4    1    7    5    6
    4    6    5   10    4
    5    1    7    2    9
    2    3    6    2    7
First Matrix is:
    6    5    3    6    3
    1    2   10   10    7
    9    2    6    6    3
    1    4   10    3    8
    5    4    1    7    8
The resulting matrix is:
   -4   -4    2    2    4
    3   -1   -3   -5   -1
   -5    4   -1    4    1
    4   -3   -3   -1    1
   -3   -1    5   -5   -1
```

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68
69 Command number 2 completed
70
71 Your options are:
72 -----------------
73 1) Add 2 matricies
74 2) Subtract 2 matricies
75 3) Multiply 2 matricies
76 4) Multiply matrix by a constant
77 5) Transpose matrix
78 6) Matrix trace
79 7) Make a copy
80 8) Test for equality
81 0) EXIT
82 Please enter your option: 3
83
84 First Matrix is:
85      6    8   10   10    8
86      2    4    5    2    7
87      9    4    7    1   10
88      1    1    6    8    9
89      3    8   10    1    8
90 First Matrix is:
91      5    6   10    4   10
92      5    5    1    5    5
93      3    9    6    2    9
94      6    5    6    6    9
95      8    8   10    6    5
96 The resulting matrix is:
97    298  298  298  298  298
98     80   80   80   80   80
99    197  197  197  197  197
100   176  176  176  176  176
101   234  234  234  234  234
102
103 Command number 3 completed
104
105 Your options are:
106 -----------------
107 1) Add 2 matricies
108 2) Subtract 2 matricies
109 3) Multiply 2 matricies
110 4) Multiply matrix by a constant
111 5) Transpose matrix
112 6) Matrix trace
113 7) Make a copy
114 8) Test for equality
115 0) EXIT
116 Please enter your option: 4
117
118 Enter the multiplication constant5
119 The original matrix is:
120     4    3    3    4    1
121     9    6    3    3    9
122     4    8   10    9    8
123     1    4   10    5    2
124     4   10    1    4    3
125 The resulting matrix is:
126    20   15   15   20    5
127    45   30   15   15   45
128    20   40   50   45   40
129     5   20   50   25   10
130    20   50    5   20   15
131
132 Command number 4 completed
133
134 Your options are:
135 -----------------
136 1) Add 2 matricies
137 2) Subtract 2 matricies
```

```
3) Multiply 2 matricies
4) Multiply matrix by a constant
5) Transpose matrix
6) Matrix trace
7) Make a copy
8) Test for equality
0) EXIT
Please enter your option: 5

The original matrix is:
     9    9    6    9    7
    10    8    3    5    9
     2    3    6   10    6
     5    5    5    8    4
     6    8   10    6    6
The resulting matrix is:
     9   10    2    5    6
     9    8    3    5    8
     6    3    6    5   10
     9    5   10    8    6
     7    9    6    4    6

Command number 5 completed

Your options are:
-----------------
1) Add 2 matricies
2) Subtract 2 matricies
3) Multiply 2 matricies
4) Multiply matrix by a constant
5) Transpose matrix
6) Matrix trace
7) Make a copy
8) Test for equality
0) EXIT
Please enter your option: 6

The original matrix is:
     7    4    4    5    1
    10    9    6    2    3
    10    5   10    6    8
     2    4    2    7    4
     6   10    8    5    7
The trace for this matrix is: 40

Command number 6 completed

Your options are:
-----------------
1) Add 2 matricies
2) Subtract 2 matricies
3) Multiply 2 matricies
4) Multiply matrix by a constant
5) Transpose matrix
6) Matrix trace
7) Make a copy
8) Test for equality
0) EXIT
Please enter your option: 7

The original matrix is:
     9   10    1   10    6
    10    7    3    7    8
     2    4    5    4    1
     2    3    6    1    3
    10    5    1   10    8
The copy of this matrix is:
     9   10    1   10    6
    10    7    3    7    8
     2    4    5    4    1
```

```
    2    3    6    1    3
   10    5    1   10    8
Testing for equality. Should be equal!!
The matricies are equal!!
Command number 7 completed

Your options are:
-----------------
1) Add 2 matricies
2) Subtract 2 matricies
3) Multiply 2 matricies
4) Multiply matrix by a constant
5) Transpose matrix
6) Matrix trace
7) Make a copy
8) Test for equality
0) EXIT
Please enter your option: 8

First Matrix is:
    7    6    4    1    5
   10    8    7    7   10
    3    7   10    8    5
    7    9    3   10    3
    8    9    5   10    2
First Matrix is:
    5   10    5    3    4
    4    4   10    3    1
    2    7    2    4    3
    7    7    7    4    4
    4    4    6    3    8
The matricies are not equal!!
Command number 8 completed

Your options are:
-----------------
1) Add 2 matricies
2) Subtract 2 matricies
3) Multiply 2 matricies
4) Multiply matrix by a constant
5) Transpose matrix
6) Matrix trace
7) Make a copy
8) Test for equality
0) EXIT
Please enter your option: 0

Testing completed.
```