## COMP 130 - Introduction to Programming with Java Final Exam, Spring 2012

## Class: MatrixAddition.java

Write a program that creates two matrices of size  $N \times N$  with random integer entries between -100 and 100. The program first displays the two matrices and then their sum. The size N is to be provided by the user.

## Sample Run:

| nter the  |           |            |            | Ma   | atrixAdditi | on  |     |  |
|-----------|-----------|------------|------------|------|-------------|-----|-----|--|
|           | size of   | the matrix | (i.e., N): | 8    |             |     |     |  |
| The first | matrix    | is:        |            |      |             |     |     |  |
| -97       |           |            | 34         | 94   | -54         | -99 | 51  |  |
| -95       | 96        | -27        | 14         | -26  | 40          | 86  | -68 |  |
| 6         | -6        | -37        | -79        | 97   | -15         | 84  | -92 |  |
| -9        | 10        | 13         | -97        | -13  | 73          | 17  | 52  |  |
| -61       | 68        | -41        | -14        | -21  | 89          | -81 | -44 |  |
| .0        | -80       | -30        | 63         | -72  | 19          | 58  | 58  |  |
| -69       | 65        | -16        | -35        | 92   | 60          | 42  | 100 |  |
| 32        | 80        | 14         | -9         | -35  | 59          | 15  | 23  |  |
| The secon | nd matrix | is:        |            |      |             |     |     |  |
| -14       | 61        | -92        | 87         | -28  | -44         | 50  | 7   |  |
| .7        | 25        | 26         | -48        | 99   | 51          | -68 | 66  |  |
| -42       | 51        | -70        | -23        | 53   | -41         | -47 | 15  |  |
| -89       | -52       | 60         | -37        | -38  | 2           | 0   | -99 |  |
| -99       | 92        | -35        | 52         | 69   | -29         | 68  | 41  |  |
| -55       | -62       | -17        | -93        | -47  | -75         | -34 | 34  |  |
| 55        | -40       | 48         | 80         | 38   | 59          | 64  | -1  |  |
| 91        | -10       | -20        | 83         | -4   | -9          | -65 | -82 |  |
|           |           | trices is: |            |      |             |     |     |  |
| -111      | 16        | -104       | 121        | 66   | -98         | -49 | 58  |  |
| -78       | 121       | -1         | -34        | 73   | 91          | 18  | -2  |  |
| -16       | 45        | -107       | -102       | 150  | -56         | 37  | -77 |  |
| -98       | -42       | 73         | -134       | -51  | 75          | 17  | -47 |  |
| -160      | 160       | -76        | 38         | 48   | 60          | -13 | -3  |  |
| -45       | -142      | -47        | -30        | -119 | -56         | 24  | 92  |  |
| -4        | 25        | 32         | 45         | 130  | 119         | 106 | 99  |  |
|           | 70        | -6         | 74         | -39  | 50          | -50 | -59 |  |