

## GetNeighbors.java

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Write program as follows:

Accept input from a file called GetNeighbors.txt. The first value will be the number of rows. The second value will be the number of cols. The third value will be the seed value. The rest of the numbers will be an unknown amount of 2 integers representing a location (row,col), that could be in or out of the matrix. Create a matrix of ints using the input dimensions. Fill the matrix with random integers ranging in value from 1 to 1000. Print the matrix in row/column format. Use the remaining number sets to fetch and print neighboring element values to the North, South, East, and West of the element position. *(you have to determine if each position was in bounds before trying to access it. If out of bounds, display -1 for that direction).*

Sample File

```
5 5
100
2 2
0 2
6 5
```

This will create the following matrix

916	251	875	989	292
667	37	289	724	714
623	718	257	458	353
60	381	479	774	120
654	429	566	773	768

Sample Output

```
916 251 875 989 292
667 37 289 724 714
623 718 257 458 353
60 381 479 774 120
654 429 566 773 768
Requested neighbors for element at row 2, col 2 (257)
North 289, South 479, East 458, West 718
Requested neighbors for element at row 0, col 2 (875)
North -1, South 289, East 989, West 251
Requested neighbors for element at row 6, col 5 (-1)
North -1, South -1, East -1, West -1
```