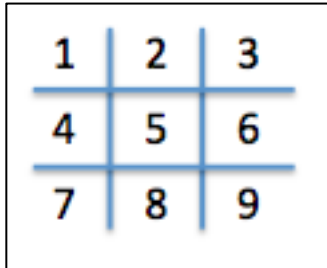


FOCUS TOPICS

- Problem decomposition
- Using all the tools in the toolbox

TASK

In the game of tic-tac-toe, the game board consists of a grid of 3x3 entry elements. Each of these nine elements can hold a single “play” character representing which of the two players chose the element during gameplay. Two vertical and two horizontal lines separate the grid elements to delineate the game board. Each grid element has a position, numbered from 1 to 9. The sample image below demonstrates the basic idea, including position labels and delineating lines.



1	2	3
4	5	6
7	8	9

Your task today is to print the game board, including the position numbers and delineating lines. You will be limited to ASCII output in NetBeans, so your output won’t look quite like the above image.

We will work together as a group to break down this task into smaller pieces, and develop the pseudocode logic you’ll need to do this. The logic must meet the following requirements:

- Position labels should be assigned by row, then column. That is, you should assign all position labels in the first row before you assign position labels in the second.
- You should assign the position labels dynamically, such that if you have a smaller or larger number of rows and columns, the logic will still work.
- The number of rows should always equal the number of columns.
- You should print lines to delineate the grid elements.

Once we have worked through the logic as a group, your task will be to code the logic.

INSTRUCTIONS

1. Create a new NetBeans project.
2. Use the problem logic discussed as a group to print your game board.
3. When your code is working, upload your .java file to the Week 8, Module 6 in-class lab dropbox.

SAMPLE OUTPUT

For a 3x3 grid, your output should look like this:

```
1|2|3
-----
4|5|6
-----
7|8|9
BUILD SUCCESSFUL (total time: 0 seconds)
```

For a 2x2 grid, your output should look like this:

```
1|2
---
3|4
BUILD SUCCESSFUL (total time: 0 seconds)
```

For a 4x4 grid, your output should look like this (there is no need to account for 2-digit number labels with the delineating lines):

```
1|2|3|4
-----
5|6|7|8
-----
9|10|11|12
-----
13|14|15|16
BUILD SUCCESSFUL (total time: 0 seconds)
```

For a 5x5 grid, your output should look like this (there is no need to account for 2-digit number labels with the delineating lines):

```
1|2|3|4|5
-----
6|7|8|9|10
-----
11|12|13|14|15
-----
16|17|18|19|20
-----
21|22|23|24|25
BUILD SUCCESSFUL (total time: 0 seconds)
```