

B10 – Unit 1 - Tic – Tac – Toe, Version 1

* Do not start this assignment until you have finished all bonuses and all programs.

Step 1. Make the board.

It looks like this:	It prints out over 5 lines, with this spacing.																																										
<pre> 1 2 3 1 - - - - - 2 - - - - - 3 </pre>	<table border="1"><tr><td></td><td></td><td>1</td><td></td><td>2</td><td></td><td>3</td></tr><tr><td>1</td><td></td><td> </td><td></td><td> </td><td></td><td></td></tr><tr><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>2</td><td></td><td> </td><td></td><td> </td><td></td><td></td></tr><tr><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>3</td><td></td><td> </td><td></td><td> </td><td></td><td></td></tr></table>			1		2		3	1									-	-	-	-	-	2									-	-	-	-	-	3						
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Step 2: Make the variables to store the sections of the board.

You need 9 variables, one for each space.

```
char a = 'a';
```

Put the variables into the board when you print it.

It looks like this:	It prints out over 5 lines, with this spacing.																																										
<pre> 1 2 3 1 a b c - - - - - 2 d e f - - - - - 3 g h i</pre>	<table border="1"><tr><td></td><td></td><td>1</td><td></td><td>2</td><td></td><td>3</td></tr><tr><td>1</td><td></td><td>a</td><td> </td><td>b</td><td> </td><td>c</td></tr><tr><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>2</td><td></td><td>d</td><td> </td><td>e</td><td> </td><td>f</td></tr><tr><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>3</td><td></td><td>g</td><td> </td><td>h</td><td> </td><td>i</td></tr></table>			1		2		3	1		a		b		c			-	-	-	-	-	2		d		e		f			-	-	-	-	-	3		g		h		i
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Step 3: Make one player go first.

Clear out all 6 variables. Change them to have a space.

```
char a = ' ';
```

Print the blank board.

Ask the user for the x value and then for the y value they want.

Add an x to that spot in the board.

Print out the new board.

Step 4: Make the other player go next.

Repeat the process until a player can go in all the locations.

Step 5: Check and see who won.

You will have a series of ifs to check each of the rows and columns.

```
if (a == b && b == c)
    then the person in a won.
```

Step 6: Ms Gorski can help you optimize it.

