

```

#include "stdafx.h"
#include <iostream>
using namespace std;

int main()
{
    const int ROWS = 3;
    //declare variables
    const int COLUMNS = 3;

    char board[ROWS][COLUMNS] = { { 'O', 'X', 'O' },           //define starting board
    { ' ', 'X', 'X' },
    { 'X', 'O', 'O' } };

    cout << "Here's the Tic-Tac-Toe board:\n";                //display board
    for (int i = 0; i < ROWS; i++)
    {
        for (int j = 0; j < COLUMNS; j++)
        cout << board[i][j];
        cout << endl;
    }

    cout << "\n'X' moves to the empty location.\n\n";          //add to board
    board[1][0] = 'X';

    cout << "Now the Tic-Tac-Toe board is:\n";
    for (int i = 0; i < ROWS; i++)
    {
        for (int j = 0; j < COLUMNS; j++)
        cout << board[i][j];
        cout << endl;
    }

    cout << "\n'X' wins!\n\n";

    system("pause");
    return 0;
}

```

```
Here's the Tic-Tac-Toe board:
OXO
XX
XOO

'X' moves to the empty location.

Now the Tic-Tac-Toe board is:
OXO
XXX
XOO

'X' wins!

Press any key to continue . . .
```

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```
#include "stdafx.h"
#include <iostream>
using namespace std;

int main()
{
    const int ROWS = 3;
    //declare variables
    const int COLUMNS = 3;

    char board[ROWS][COLUMNS] = { {'X', 'O', 'X'},           //define starting board
    {'O', 'O', ''},
    {'X', 'X', 'O'} };

    cout << "Here's the Tic-Tac-Toe board:\n";                //display board
    for (int i = 0; i < ROWS; i++)
    {
        for (int j = 0; j < COLUMNS; j++)
        cout << board[i][j];
        cout << endl;
    }

    cout << "\n'O' moves to the empty location.\n\n";          //add to board
    board[1][2] = 'O';

    cout << "Now the Tic-Tac-Toe board is:\n";
    for (int i = 0; i < ROWS; i++)
    {
        for (int j = 0; j < COLUMNS; j++)
        cout << board[i][j];
        cout << endl;
    }
```

```
    cout << "\n'O' wins!\n\n";

    system("pause");
    return 0;
}
```

---

```
Here's the Tic-Tac-Toe board:
XOX
OO
XXO

'O' moves to the empty location.

Now the Tic-Tac-Toe board is:
XOX
OOO
XXO

'O' wins!

Press any key to continue . . .
```