Matlab matrix assignment.

Goals: Give student exposure to writing a Matlab program.

File: Create a script file in Matlab named Matrix.m. This is the only file you will submit on easel for this assignment.

Complete the following program to work for the operations listed below.

- '-' subtract two matrices. Ask for the indexes of two matrices. Subtract the second from the first and store the result in the next spot in the Matrices list.
- '*' multiply two matrices. Ask for the indexes of two matrices. Multiply them and store the result in the next spot in the Matrices list.
- 's' scalar multiply. Ask for the index of a matrix. Ask the user for a scalar value. Multiply the matrix and the scalar and store the result in the next spot in the Matrices list.
- 'd' display matrix. Ask for the index of a matrix. Display the matrix at that index.
- 't' transpose matrix. Ask for the index of a matrix. Transpose the matrix and store the result in the next spot in the Matrices list.
- 'i' invert matrix. Ask for the index of a matrix. Invert the matrix and store the result in the next spot in the Matrices list.

Starter Code

```
A = input('First Matrix >');
B = input('Second Matrix >');

matrixCount = 2;

Matrices{1} = A;
Matrices{2} = B;

option = '';

while strcmp(option, 'q') == 0
    option = input('Operation? ', 's');

    if strcmp(option, '+') == 1
        matrixIndex1 = input('Matrix 1 index? ');
        matrixIndex2 = input('Matrix 2 index? ');

        matrixCount = matrixCount + 1 ;
        Matrices{matrixCount} = Matrices{matrixIndex1} +
Matrices{matrixIndex2};
        Matrices{matrixCount}
    end

end
```