2D array practice questions

I. Menu driven program (matrices can be 2X2 or 3X3 or 2X3 or 3X2). Take the input of size of the matrix from the user after selecting each menu
   1. Add 2 matrices
   2. Subtract 2 matrices
   3. Multiply 2 matrices
   4. Divide 2 matrices

II. Menu driven program (matrices can be 2X2 or 3X3 or 2X3 or 3X2). Take the input of size of the matrix from the user after selecting each menu
   1. Transpose of a matrix
   2. Sum of right diagonals of square matrix
   3. Sum of left diagonals of square matrix
   4. Sum of numbers in the row
   5. Sum of numbers in the column

III. Menu driven program (matrices can be 2X2 or 3X3 or 2X3 or 3X2). Take the input of size of the matrix from the user after selecting each menu
   1. Make the inputted matrix as Lower triangular matrix
   2. Make the inputted matrix as Upper triangular matrix
   3. Check whether a matrix is sparse matrix or not
   4. Check whether 2 matrices are equal or not
   5. Check whether a matrix is identity matrix
   6. Find the determinant of the matrix

Note: Each menu has to be given in separate functions. Passing 2D array to the function can be done atleast for one menu in each problem

You can pass the 2D array to function in this way:

```
#include <stdio.h>
void displayNumbers(int num[2][2]);
int main()
{
    int num[2][2];
    printf("Enter 4 numbers:\n");
    for (int i = 0; i < 2; ++i)
        for (int j = 0; j < 2; ++j)
            scanf("%d", &num[i][j]);

    // passing multi-dimensional array to a function
    displayNumbers(num);
    return 0;
}

void displayNumbers(int num[2][2])
{
    printf("Displaying:\n");
    for (int i = 0; i < 2; ++i) {
        for (int j = 0; j < 2; ++j) {
           printf("%d\n", num[i][j]);
        }
    }
}
```