


Faculty of Electrical, Electronic & Computer Technology	 SAXONY EGYPT UNIVERSITY FOR APPLIED SCIENCE AND TECHNOLOGY
Computer Programming	
ECT 121	
Dr. Amina Elhawary	
Eng. Heba Mohsen	

Sheet 6

1) Problems :

1. Write a program to Sum two Matrices 3*3 .

Input
Enter elements of first matrix (3x3): 1 2 3 4 5 6 7 8 9 Enter elements of second matrix (3x3): 9 8 7 6 5 4 3 2 1
Output
Sum of matrices: 10 10 10 10 10 10 10 10 10

2. Write a program to Transpose of a Matrix 2*3.

Input
Enter a 2x3 matrix: 1 2 3 4 5 6
Output
Transpose of the matrix is: 1 4 2 5 3 6

3. Write a program to Sum of Each Row in matrix 2*3.

Input
Enter a 2x3 matrix: 1 2 3 4 5 6
Output
Sum of row 1 = 6 Sum of row 2 = 15

4. Write a program to Count Even and Odd Numbers in matrix 2*2.

Input
Enter a 2x2 matrix: 1 4 3 2
Output
Even numbers: 2 Odd numbers: 2

5. Find Maximum Element in a matrix 4*4.

Input
Enter 16 elements for 4x4 matrix: 5 12 3 9 15 1 8 4 7 6 11 2 10 14 13 16
Output
Maximum element is: 16

6. Print Diagonal Elements in matrix 3*3 .

Input
Enter a 3x3 matrix: 1 2 3 4 5 6 7 8 9
Output

Main diagonal: 1 5 9

7. Write a program to Search Element in matrix 3*4.

Input
Enter 12 elements for 3x4 matrix: 10 20 30 40 50 60 70 80 90 100 110 120 Enter element to search: 70
Output
Element 70 found at position [1][2]

8. Write a program to Check for Symmetric Matrix.

Input
Enter 3x3 matrix: 1 2 3 2 4 5 3 5 6
Output
Matrix is symmetric.

Input
Enter 3x3 matrix: 1 0 2 0 4 5 9 5 6
Output
Matrix is not symmetric.