## LAB SHEET 6

## **Multi Dimensional Arrays**

- 1. Write a program to add 2 matrices.
- 2. Write a program to find the transpose of a given matrix. The transpose should be stored in a separate 2 D array.
- 3. Write a program to multiply 2 matrices.
- 4. In a company there are 5 sales men. Each sales man is supposed to sell 3 products. Write a program to print the total sales by each sales man and total sales of each item.
- 5. Write program to read marks of 4 subjects of 15 students.
  - i. Find the total marks and average of each student.
  - ii. Calculated the class average for the 4 subjects.
  - iii. Find the highest mark in each subject.
- 6. Write a program to read a matrix from the user and do the following:
  - i. Print the upper triangular matrix
  - ii. Print the lower triangular matrix
  - iii. Print the diagonal elements