NIT-J CSED

Computer Programming Lab

Lab 7 : Multi-dimensional Arrays, pointer and Functions

1. WAP to add, subtract & perform scalar multiplication on 2D matrices.

2. WAP to find the multiplication of matrices A and B into matrix C where the initialization of matrices A and B should be done by a function initMat(), printing of matrices should be done by printMat() and multiplication should be done by mulMat(). You need to pass the matrices into functions according to need.

3. Assume that you now planned to stored subject wise student marks in the same *student_array* as discussed in Assignment-VIII by modifying it to a two dimensional array as shown below for three students and six subject marks.

Rollno/Subject	1	2	3	4	5	6	*Total*
1	30	83	45	92	60	76	386
2	45	43	67	52	89	56	352
3	28	10	29	68	73	62	270
Total	103	136	141	212	222	194	**1008** (Grand Total)

Assuming 'n' students and 'm' subjects, design a menu driven program using function which will do the followings where all the students' rollno and subject name are integers as shown in the above table.

i) Read those student marks and display them on the screen along with their rollno using pointer.
ii) Display the subject-wise and student-wise total marks obtained and the grand total.
iii) Display the student details who obtained the highest mark.

Assignment

1. WAP to perform following operation on matrix (3*3) using function and pointer
   1. transpose of matrix
   2.check weather symmetric or not.
2. Write a function which takes to sorted arrays as parameters and merge then into an another shorted array. Write a program to implement above function.