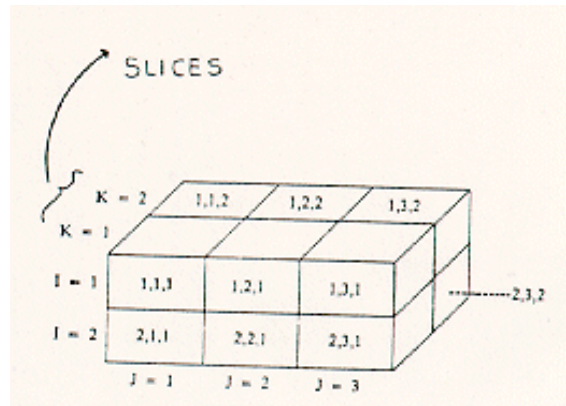# THREE DIMENSIONAL ARRAYS

Introduction
A three dimensional array is just a group of related two dimensional arrays:

Example Problem:
The following tables represent the number of tickets issued for various traffic violations in Hamilton for two particular successive years.

1982	no park	no stop	careless drive	illegal u turn
Jan	2	5	4	1
Feb	4	8	3	5
Mar				
.				
Dec				

1983	no park	no stop	careless drive	illegal u turn
Jan	5	9	4	3
Feb	3	5	8	2
Mar				
.				
Dec				

Set up a 3 dimensional array where the first slice represents 1982 results and the second slice represents 1983 results.
1.   Write a program segment which reads in all the appropriate data and echoes the data only.
2.   All the entries for 1983 were entered incorrectly by the secretary. They should all be double what they are, except for the careless driving numbers, which are correct. Make the proper modifications to the data stored.
3.   Write a program segment which creates a 2 dimensional array which stores the differences between the number of violations for successive years, for corresponding months and violation types. Display this table with months and traffic violation names included.

K = 2

700	3500	62	651
73	57	453	962
459	54	5763	492

K = 1

50	0	16	2
3	4	0	98
0	1	4	220

The table above consists of the quantities of various items that are stocked at several warehouses belonging to a company. The rows represent the warehouses (1-3), the columns represent the items (1-4). The first slice represents the inventory presently on hand. The second slice represents all the inventory shipped during the current year.

Assume that the price of items 1,2,3 and 4 is $5,$6, $4.26, and $2.42, respectively, store these in a one-dimensional array called cost.

Write a program which will answer the following questions.

a)   What is the total stock and value of item 2 shipped in the current year.
b)   What is the total value of all inventory on hand.
c)   What is the total value of all items shipped in the current year.