TWO DIMENSIONAL ARRAYS:

TABLE LOOKUPS

INVENTORY APPLICATION

Imagine an inventory of 10 parts (nuts,bolts, nails etc...), and each part coming in 3 sizes (small medium, and large). Each part is given a 4 digit part number by which the parts are referenced.

PART NUMBER	SMALL	MEDIUM	LARGE	TOTAL
1001	11	10	10	31
2002	0	0	0	0
3003	0	3	0	3
4004	0	0	0	0
5005	20	0	0	20
6006	0	0	4	4
7007	0	0	4	4
8008	4	4	0	8
9009	0	0	33	33
9876	0	0	0	0

Develop a program which will accept as input a part number, a size and the amount received or the amount issued from inventory. Keep track of the current inventory position.

Program Development

PartNumber(R)

PartNumber(1)	1001
PartNumber(2)	2002
.	.
.	.
.	.
.	.
PartNumber(9)	9009
PartNumber(10)	9876

PartSize(C)

PartSize(1)	small
PartSize(2)	medium
PartSize(3)	large

Inventory(R,C)

11		
	3	

Note: Since the inputted data is going to identify items by **part number** (1001) and by **size** (small) we must somehow convert these pieces of information into **rows** (1001 -> 1) and **columns** (small -> 1). We then use these numbers 1 and 1, in this case, to specfically point to a location in the inventory table -> inventory(1,1), which presently has a value of 11.

Another Example:
If the inputted data refers to part number 3003 and medium, our lookups must find **row 3** for part number 3003 and **column 2** for part size medium. Therefore the exact location in the table we want is **inventory (3,2)** , which currently has a value of 3.