ARRAY

Array

Arrays are the R data objects which can store data in more than two dimensions. It is created by array() function.

```
X<-array(1:40,c(2,2,10),dimnames=list(colname, rowname,matrixname))
X
```

Array

Array can be created by passing vector, matrix or by simply changing the dimensions of vector or matrix.

```
A<-1:40
dim(A)<-c(2,2,10)
M<-matrix(1:40,4,10)
A<-array(M,c(2,2,10)
```

Accessing array

- 3rd row of second matrix
- x[3,,2]
- Element in 1st row, 3rd column of 1 matrix
- X[1,3,1]
- Second matrix
- x[,,2]
- Creating matrix from array
- mat1<-x[,,1]

Filling pattern of array

- The function aperm(a, perm) may be used to permute an array, a. The easiest way to think of this operation is as a generalization of transposition for matrices. The dimensions will exchanged as per the order given in variable perm.
- > B <- aperm(A, c(2,1)) This will generate a transpose of matrix A.

QUESTIONS