Vectorized Operations

Vectorized operation on vectors

```
x<-1:4;y<-6:9
x+y

## [1] 7 9 11 13

x>2

## [1] FALSE FALSE TRUE TRUE

x>=2

## [1] FALSE TRUE TRUE TRUE

x*y

## [1] 6 14 24 36

x/y

## [1] 0.1666667 0.2857143 0.3750000 0.4444444
```

Vectorized operation on matrices (elementwise)

```
x<-matrix(1:4,2,2);y<-matrix(rep(10,4),2,2)
x*y

## [,1] [,2]
## [1,] 10 30
## [2,] 20 40

x/y

## [,1] [,2]
## [1,] 0.1 0.3
## [2,] 0.2 0.4</pre>
```

Vectorized operation on matrices (true Operations)

```
x<-matrix(1:4,2,2);y<-matrix(rep(10,4),2,2)

x %*% y

## [,1] [,2]

## [1,] 40 40

## [2,] 60 60
```