Vectors

```
x<-c(0.5,0.6)  ##numeric
y<-c(TRUE,FALSE)  ##logical
z<-c(T,F)  ##character
b<-c(9:29)  ##integer
c<-c(1+0i,2+4i)  ##complex
x;y;z;a;b;c;

## [1] TRUE FALSE

## [1] TRUE FALSE

## [1] TRUE FALSE

## [1] 1 + 01 1 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

## [1] 1 + 01 2 + 41</pre>
```

Vector using vector function

```
x<-vector("numeric", length=10)
x
## [1] 0 0 0 0 0 0 0 0 0 0</pre>
```

convert data types

```
x<-0:6
class(x)

## [1] "integer"

as.numeric(x)

## [1] 0 1 2 3 4 5 6

as.logical(x)</pre>
```

[1] FALSE TRUE TRUE TRUE TRUE TRUE

```
as.character(x)
## [1] "0" "1" "2" "3" "4" "5" "6"
```

Non-sensical coersion

```
x<-c("a","b","c")
as.numeric(x)

## Warning: NAs introduced by coercion

## [1] NA NA NA

as.logical(x)

## [1] NA NA NA

as.complex(x)

## Warning: NAs introduced by coercion

## [1] NA NA NA</pre>
```

Lists

```
x<-list(1,"a",TRUE,1+4i)
x

## [[1]]
## [1] 1
##
## [[2]]
## [1] "a"
##
## [[3]]
## [1] TRUE
##
## ## [[4]]
## [1] 1+4i</pre>
```