Introduction to R

Pramod Duvvuri

4/9/2019

```r
### vectors, data, matrices, subsetting
x=c(2,7,5)
x
```

```
## [1] 2 7 5
```

```r
y=seq(from=4,length=3,by=3)
?seq
y
```

```
## [1]  4  7 10
```

```r
x+y
```

```
## [1]  6 14 15
```

```r
x/y
```

```
## [1] 0.5 1.0 0.5
```

```r
x^y
```

```
## [1]      16  823543 9765625
```

```r
x[2]
```

```
## [1] 7
```

```r
x[2:3]
```

```
## [1] 7 5
```

```r
x[-2]
```

```
## [1] 2 5
```

```r
x[-c(1,2)]
```

```
## [1] 5
```

```r
z=matrix(seq(1,12),4,3)
z
```

```
##      [,1] [,2] [,3]
## [1,]    1    5    9
## [2,]    2    6   10
## [3,]    3    7   11
## [4,]    4    8   12
```

```r
z[3:4,2:3]
```

```
##      [,1] [,2]
## [1,]    7   11
## [2,]    8   12
```

```
z[,2:3]
```

```
##      [,1] [,2]
## [1,]    5    9
## [2,]    6   10
## [3,]    7   11
## [4,]    8   12
```

```
z[,1]
```

```
## [1] 1 2 3 4
```

```
z[,1,drop=FALSE]
```

```
##      [,1]
## [1,]    1
## [2,]    2
## [3,]    3
## [4,]    4
```

```
dim(z)
```

```
## [1] 4 3
```

```
ls()
```

```
## [1] "x" "y" "z"
```

```
rm(y)
ls()
```

```
## [1] "x" "z"
```