

# Building Matrices

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```
# Matrices----
```

```
# rbind() -- row bind  
# cbind() -- column bind
```

```
my.data <- 1:20
```

```
A <- matrix(my.data, 4, 5)  
A
```

```
##      [,1] [,2] [,3] [,4] [,5]  
## [1,]    1    5    9   13   17  
## [2,]    2    6   10   14   18  
## [3,]    3    7   11   15   19  
## [4,]    4    8   12   16   20
```

```
B <- matrix(my.data, 4, 5, byrow=T)  
B
```

```
##      [,1] [,2] [,3] [,4] [,5]  
## [1,]    1    2    3    4    5  
## [2,]    6    7    8    9   10  
## [3,]   11   12   13   14   15  
## [4,]   16   17   18   19   20
```

```
# Get to 10  
B[2,5]
```

```
## [1] 10
```

```
#rbind
```

```
r1 <- c("I", "am", "happy")  
r2 <- c("what", "a", "day")  
r3 <- c(1,2,3)  
C <- rbind(r1,r2,r3)  
C
```

```
##      [,1] [,2] [,3]  
## r1 "I"    "am" "happy"  
## r2 "what" "a"  "day"  
## r3 "1"    "2"  "3"
```

```
#cbind
```

```
D <- cbind(r1,r2,r3)
```

```
D
```

```
##      r1      r2      r3  
## [1,] "I"      "what" "1"  
## [2,] "am"     "a"     "2"  
## [3,] "happy"  "day"   "3"
```