In [8]:
```r
mat = matrix(c(3:14),nrow = 4, byrow = TRUE)
mat
```

```
 3   4   5
 6   7   8
 9  10  11
12  13  14
```

In [17]:
```r
mat = matrix(c(3:14),nrow = 4, byrow = FALSE)
mat
```

```
3   7  11
4   8  12
5   9  13
6  10  14
```

In [18]:
```r
dimnames(mat) <- list(letters[1:4],letters[1:3])
mat
```

	a	b	c
a	3	7	11
b	4	8	12
c	5	9	13
d	6	10	14

In [19]:
```r
print(mat[1,3])
```

```
[1] 11
```

In [20]:
```r
print(mat[4,2])
```

```
[1] 10
```

In [21]:
```r
print(mat[2,])
```

```
 a  b  c
 4  8 12
```

In [22]:
```r
print(mat[,3])
```

```
  a   b   c   d
 11  12  13  14
```

In [23]:
```
m1 = matrix(c(1:6),nrow = 2,ncol = 3, byrow = TRUE, dimnames =
list(letters[1:2],letters[1:3]))
m1
```

	a	b	c
a	1	2	3
b	4	5	6

In [24]:
```
m2 = matrix(c(7:12),nrow = 2,ncol = 3, byrow = FALSE, dimnames
= list(letters[1:2],letters[1:3]))
m2
```

	a	b	c
a	7	9	11
b	8	10	12

In [26]:
```
matadd <- m1 + m2
matadd
```

	a	b	c
a	8	11	14
b	12	15	18

In [27]:
```
matsub <- m1 - m2
matsub
```

	a	b	c
a	-6	-7	-8
b	-4	-5	-6

In [28]:
```
matmul <- m1 * m2
matmul
```

	a	b	c
a	7	18	33

	a	b	c
b	32	50	72

In [31]:

```r
matdiv <- m1 / m2
round(matdiv,digits = 2)
```

	a	b	c
a	0.14	0.22	0.27
b	0.50	0.50	0.50

In [36]:

```r
v <- readline()
v <- strsplit(v," ")
v <- as.integer(v[[1]])

w <- readline()
w <- strsplit(w," ")
w <- as.integer(w[[1]])

maat <- matrix(c(w,v),nrow = 3, byrow = FALSE)
dimnames(maat) <- list(letters[1:3],letters[4:7])
maat
```

	d	e	f	g
a	7	10	1	4
b	8	11	2	5
c	9	12	3	6

In [ ]: