

Marginal Tables with *R*

- Data frame: Use **xtabs**
 - `UCB <- xtabs(Freq ~ Dept + Gender + Admit, data = berkeley)`
 - `GenderAdmit <- xtabs(Freq ~ Gender + Admit, data = berkeley)`
 - `xtabs(Freq ~ Dept + Admit + Gender, data = berkeley)`
- Factors: Use **table**
 - `deathrow <- table(Prace, DeathPen, Vrace)`
 - `PR_by_DP = table(Prace, DeathPen)`
 - `table(Vrace, DeathPen, Prace)`
- Data already in a table: Use **margin.table**

margin.table

```
> lizards  
, , Species = Sagrei
```

```
      Diameter  
Height  le 2.5 gt 2.5  
      gt 5.0    15    18  
      le 5.0    48    84
```

```
, , Species = Angusticeps
```

```
      Diameter  
Height  le 2.5 gt 2.5  
      gt 5.0    21     1  
      le 5.0     3     2
```

```
> species_by_height = margin.table(lizards,margin=c(3,1))
```

```
> species_by_height
```

```
      Height  
Species      gt 5.0 le 5.0  
Sagrei           33    132  
Angusticeps      22     5
```

```
> # spec_by_height_by_diam = margin.table(lizards,margin=c(3,1,2))
```