

# Data Frames

- Object to hold rectangular data sets
  - Rows are observations
  - Columns are variables
- Each column has one type of data in it
- Each row can have multiple types of data in it
- Columns are named; rows can be

# Iris Data Frame

```
> iris
```

|     | Sepal.Length | Sepal.Width | Petal.Length | Petal.Width | Species    |
|-----|--------------|-------------|--------------|-------------|------------|
| 1   | 5.1          | 3.5         | 1.4          | 0.2         | setosa     |
| 2   | 4.9          | 3.0         | 1.4          | 0.2         | setosa     |
| 3   | 4.7          | 3.2         | 1.3          | 0.2         | setosa     |
| 4   | 4.6          | 3.1         | 1.5          | 0.2         | setosa     |
| 5   | 5.0          | 3.6         | 1.4          | 0.2         | setosa     |
| 6   | 5.4          | 3.9         | 1.7          | 0.4         | setosa     |
| 7   | 4.6          | 3.4         | 1.4          | 0.3         | setosa     |
| 8   | 5.0          | 3.4         | 1.5          | 0.2         | setosa     |
| 9   | 4.4          | 2.9         | 1.4          | 0.2         | setosa     |
| ... |              |             |              |             |            |
| 51  | 7.0          | 3.2         | 4.7          | 1.4         | versicolor |
| 52  | 6.4          | 3.2         | 4.5          | 1.5         | versicolor |
| 53  | 6.9          | 3.1         | 4.9          | 1.5         | versicolor |
| 54  | 5.5          | 2.3         | 4.0          | 1.3         | versicolor |
| ... |              |             |              |             |            |