

Practical Work N° 4: Descriptive Statistics

- **Creating Numeric Variables**

```
X <- c(12, 15, 15,15,18, 22,22, 30, 35,40,40,40, 40)
```

- **Basic Statistical Measures**

```
T=table(X)
```

```
V=c(T)
```

```
data.frame(Eff=V, EffCum=cumsum(V), Freq=V/sum(V), FreqCum=cumsum(V/sum(V)))
```

```
mean(X)
```

```
mode = as.numeric(names(T[T == max(T)]))
```

```
median(X)
```

```
quantile(X)
```

```
min(X)
```

```
max(X)
```

```
range(X)
```

```
var(X)
```

```
sd(X)
```

```
summary(X)
```

- **Data Visualization**

```
barplot(T)
```

```
pie(T, radius=1)
```

```
boxplot(X, main="Boxplot", col="red")
```