Clase1.R

Usuario

2019-08-06

```
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#Clase 1

dbh <- c(16.5, 25.3, 22.1, 17.2, 16.1, 8.1, 34.3, 5.4, 5.7, 11.2, 24.1,
         14.5, 7.7, 15.6, 15.9, 10, 17.5, 20.5, 7.8, 27.3, 9.7, 6.5,
         23.4, 8.2, 28.5, 10.4, 11.5, 14.3, 17.2, 16.8)

length(dbh)
```

```
## [1] 30
```

```
sum(dbh)/length(dbh)
```

```
## [1] 15.64333
```

```
mean(dbh)
```

```
## [1] 15.64333
```

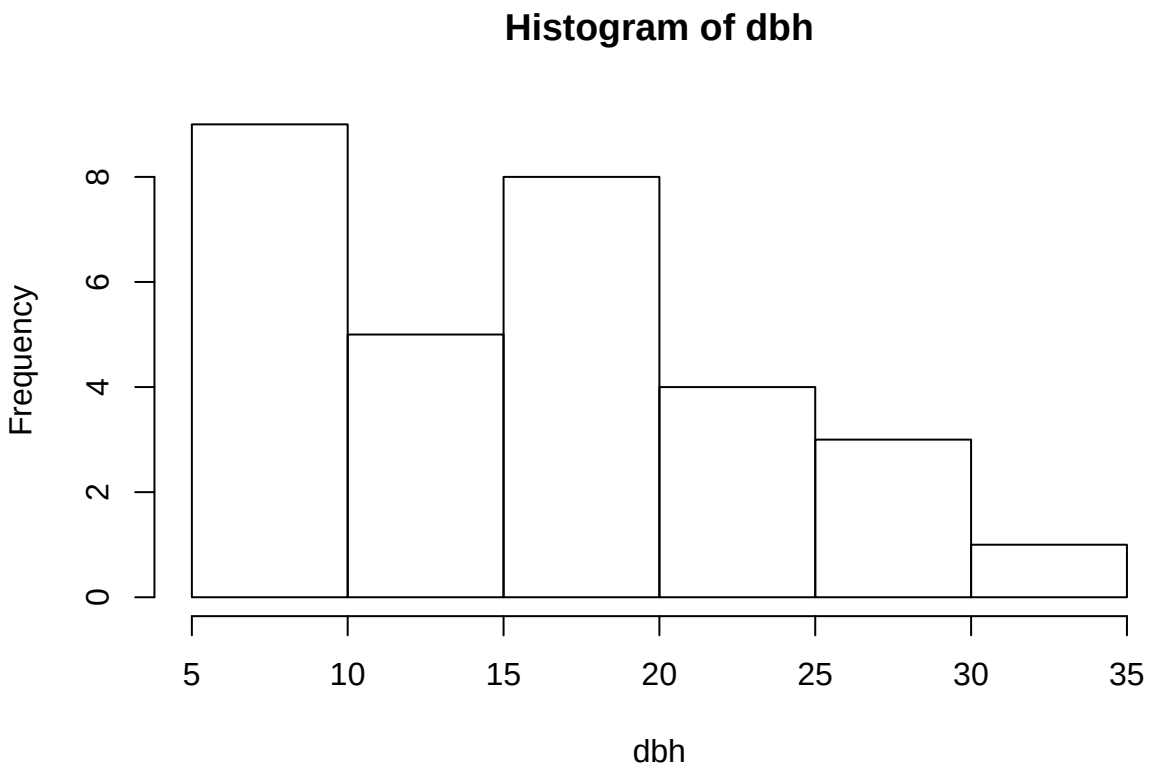
```
range(dbh)
```

```
## [1]  5.4 34.3
```

```
stem(dbh)
```

```
##
##   The decimal point is 1 digit(s) to the right of the |
##
##   0 | 5678888
##   1 | 000124
##   1 | 566677778
##   2 | 1234
##   2 | 579
##   3 | 4
```

```
hist(dbh)
```




```
moda=function(x)
{
  #Función que encuentra la moda de un vector x
  m1 <- sort(table(x),decreasing=T)
  moda <- names(m1[m1==m1[1]])
  moda <- as.numeric(moda)
  return(moda)
}

moda(dbh)
```

```
## [1] 17.2
```

```
quantile(dbh, 0.25)
```

```
##   25%
## 9.775
```

```
quantile(dbh, 0.5)
```

```
##   50%
## 15.75
```

```
quantile(dbh, 0.75)
```

```
##   75%
## 19.75
```

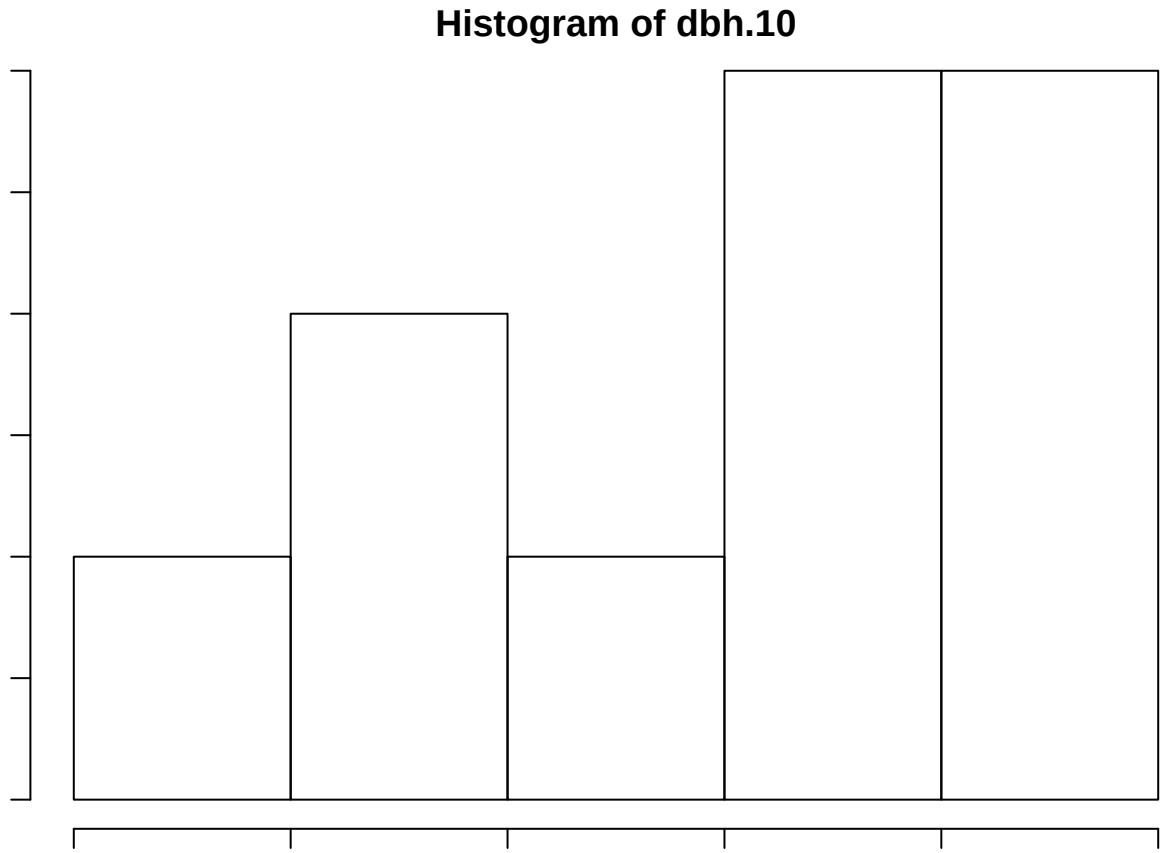
```r
fivenum(dbh)
```

```
## [1]  5.40  9.70 15.75 20.50 34.30
```

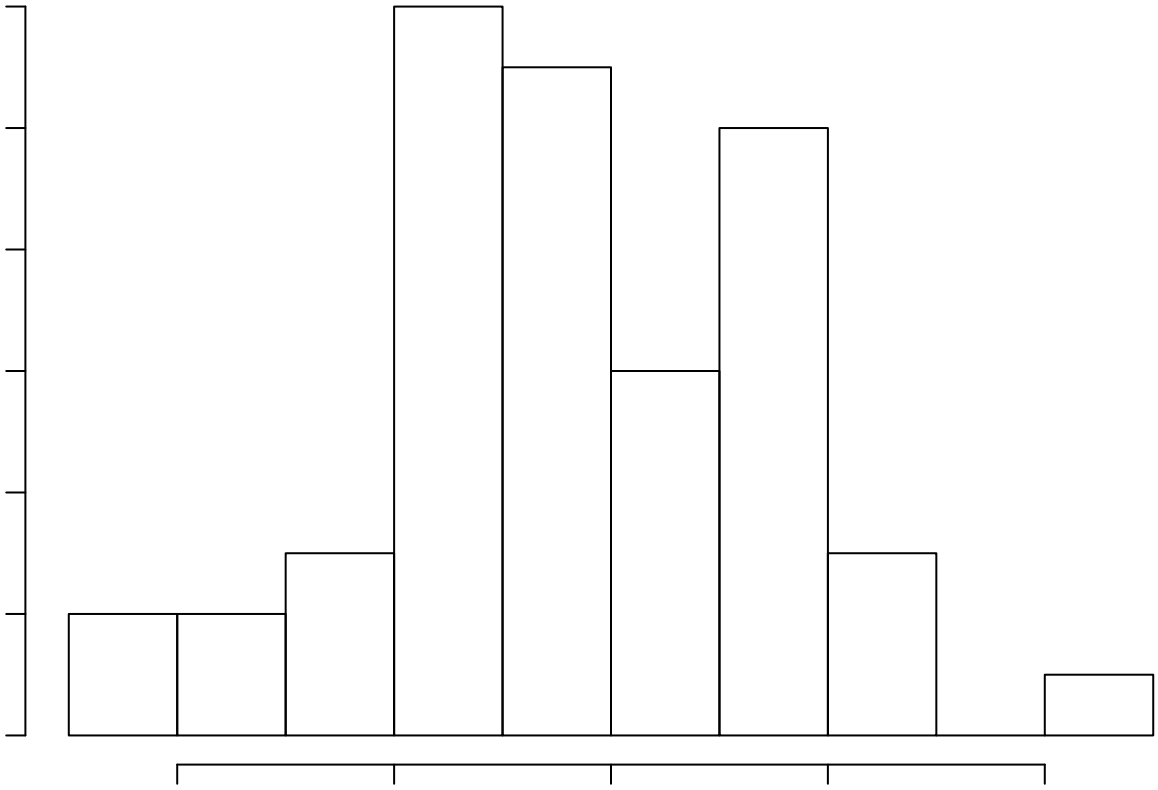
```r
100*(sd(dbh) / mean(dbh))
```

```
## [1] 47.61704
```

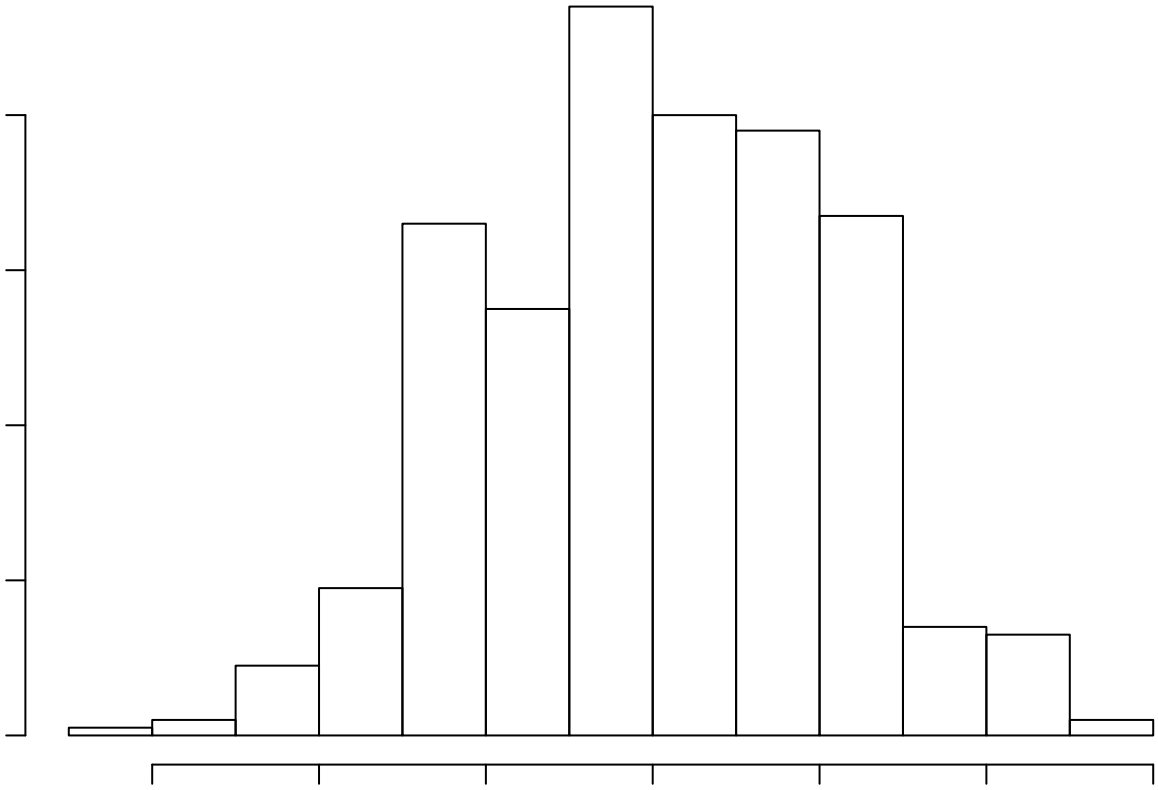
```r
par(mar=c(1,1,1,1))
set.seed(10)
dbh.10 <- rnorm(10)
hist(dbh.10)
```



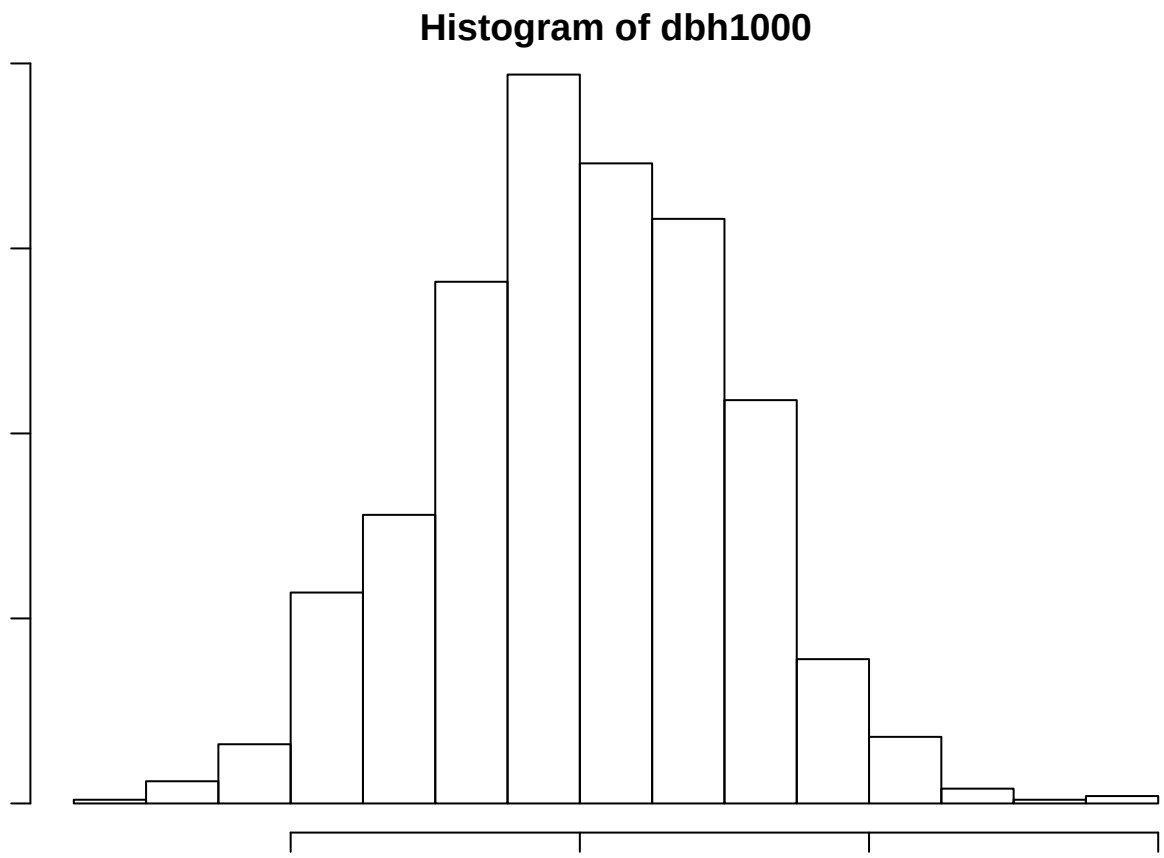

```r
dbh50 <- rnorm(50)
hist(dbh50)
```




```
dbh500 <- rnorm(500)
hist(dbh500)
```




```
dbh1000 <- rnorm(1000)
hist(dbh1000)
```




```
shapiro.test(dbh)
```

```
##
##  Shapiro-Wilk normality test
##
## data:  dbh
## W = 0.9463, p-value = 0.1344
```