"Stats-2015-Spring-L03a"


```
ch06 <- read.csv("data/5e/ch06.csv",header=TRUE)
nrow(ch06)
```

```
## [1] 120
```

```
# Uniform
x <- runif(20); x
```

```
##  [1] 0.74680213 0.12444154 0.52583088 0.08094974 0.84473300 0.50626253
##  [7] 0.49980146 0.81061333 0.49136512 0.80907699 0.58126036 0.14070233
## [13] 0.84029488 0.59157689 0.24667044 0.60768567 0.03044323 0.27558176
## [19] 0.71015755 0.14196603
```

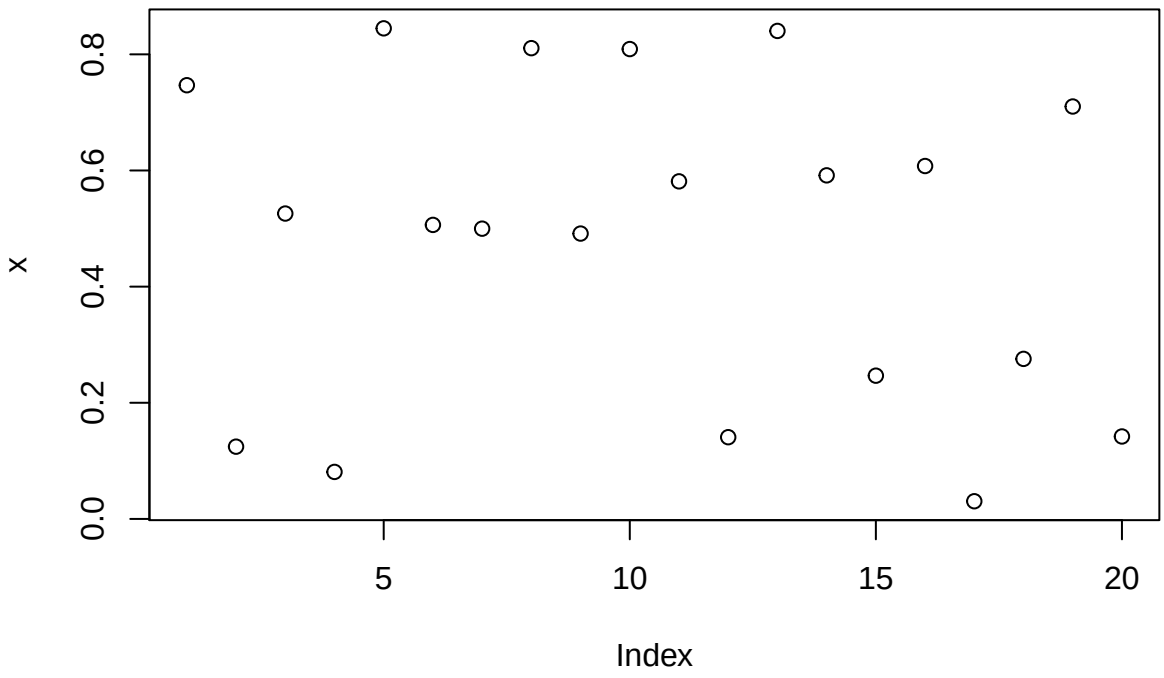
```
mean(x)
```

```
## [1] 0.4803108
```

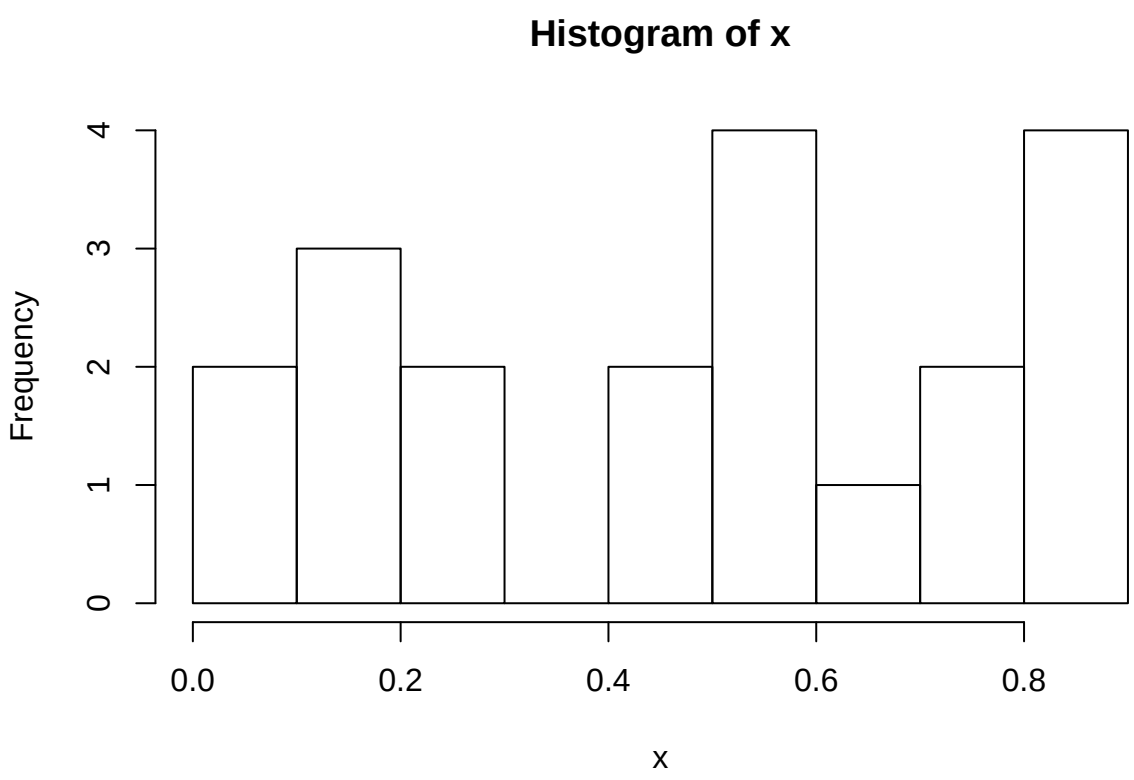
```
sd(x)
```

```
## [1] 0.2772321
```

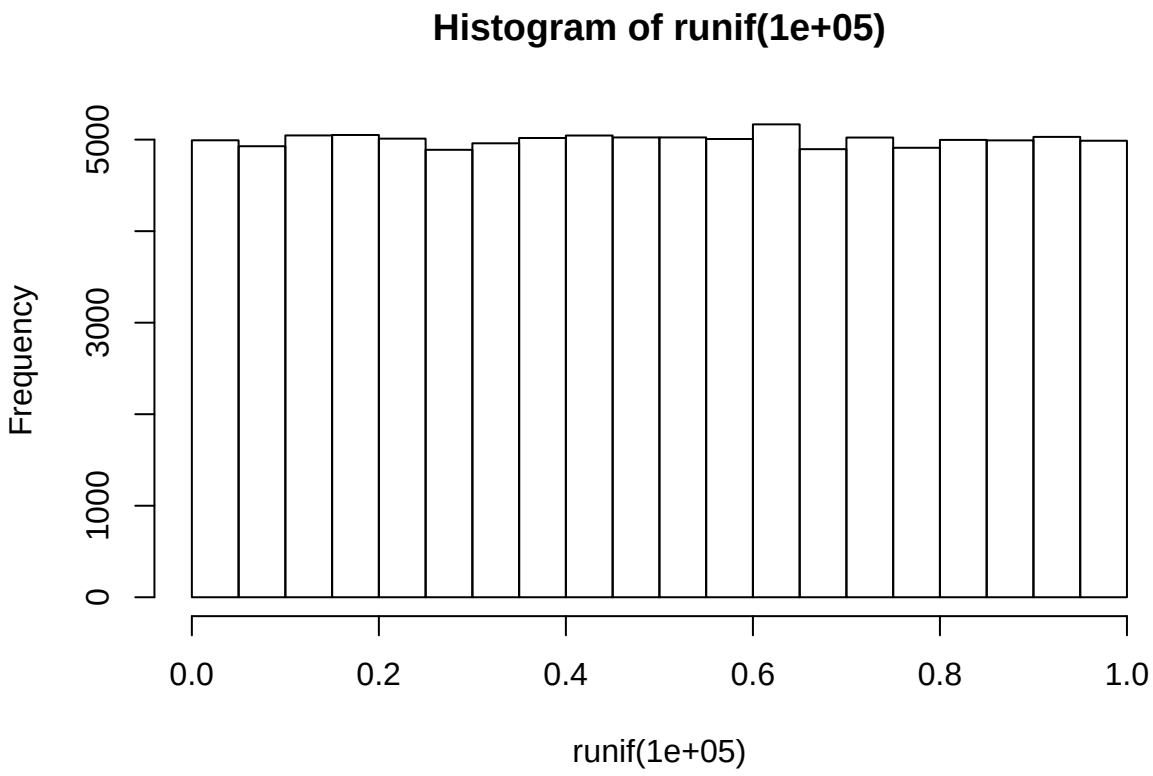
```
plot(x)
```



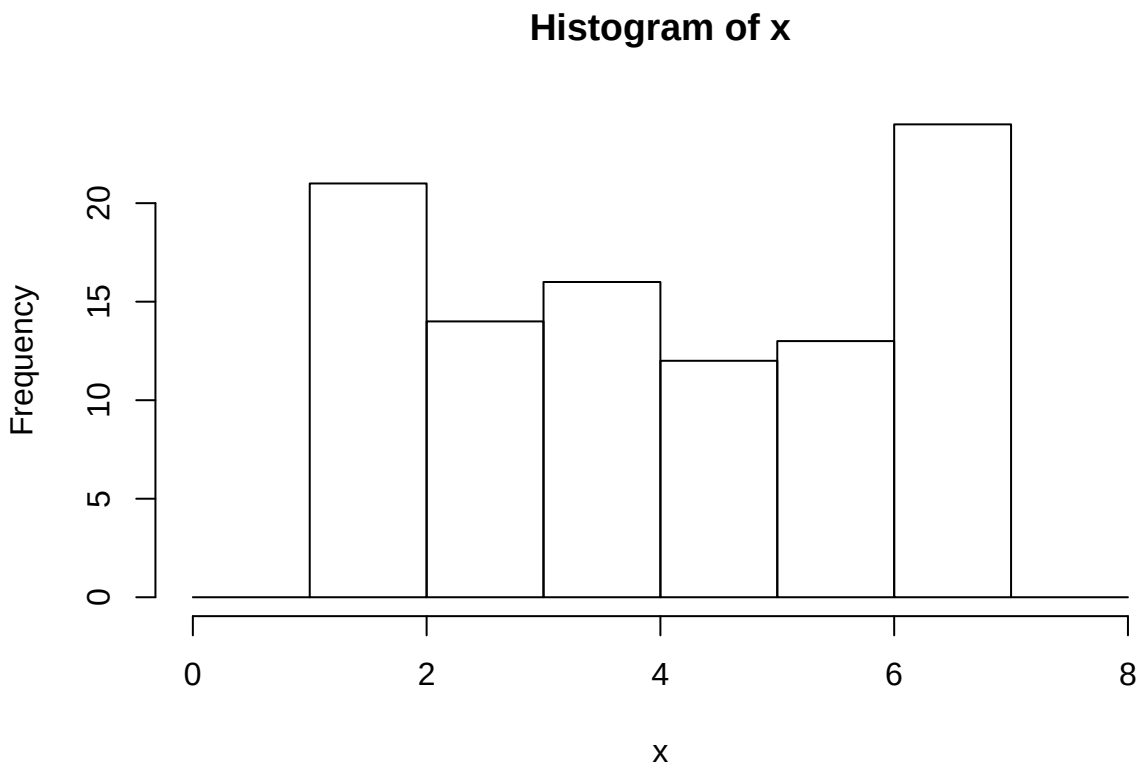

```
hist(x)
```




```
hist(runif(100000))
```




```
x <-runif(100,min=1,max=7)
hist(x,breaks=0:8)
```




```r
0:8
```

```
## [1] 0 1 2 3 4 5 6 7 8
```

```r
# Density function.
dunif(4,1,7)
```

```
## [1] 0.1666667
```

```r
punif(0,1,7)
```

```
## [1] 0
```

```r
punif(7,1,7)
```

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

```r
punif(4,1,7)
```

```
## [1] 0.5
```

```r
punif(3,min=1,max=7) - punif(2,1,7)
```

```
## [1] 0.1666667
```

```r
pnorm(1.5)
```

```
## [1] 0.9331928
```

```r
pnorm(-1.5,lower.tail=FALSE)
```

```
## [1] 0.9331928
```

```r
# the 68%
pnorm(1)-pnorm(-1)
```

```
## [1] 0.6826895
```

```r
pnorm(-6,lower.tail=TRUE)+pnorm(6,lower.tail=FALSE)
```

```
## [1] 1.973175e-09
```

```r
pnorm(5.5,mean=5,sd=2)
```

```
## [1] 0.5987063
```