

# Student's t-Test in R.\*

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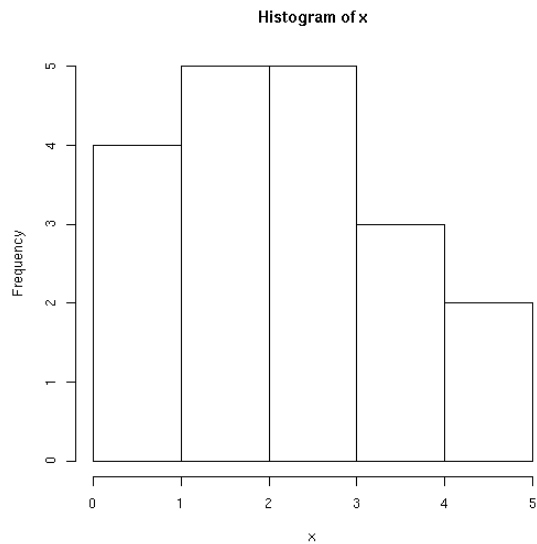
## 1 Example 1

```
> x = c(1, 2, 3, 4, 3, 2, 4, 1, 0, 2, 3, 4, 0, 5, 2, 3, 2, 3, 5)
> t.test(x, alternative="greater", mu=0.0, conf.level=0.99)
```

One Sample t-test

```
data: x
t = 7.6733, df = 18, p-value = 2.207e-07
alternative hypothesis: true mean is greater than 0
99 percent confidence interval:
 1.721113      Inf
sample estimates:
mean of x
 2.578947
```

>



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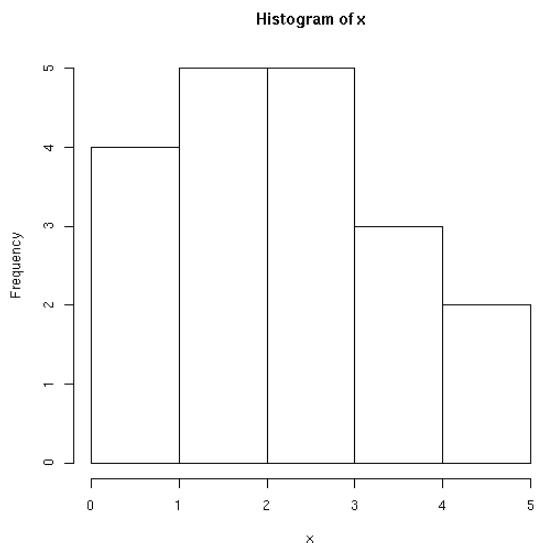
## 2 Example 2

```
> x = c(-100, 2, 3, 4, 3, 2, 4, 1, 0, 2, 3, 4, 0, 5, 2, 3, 2, 3, 5)
> t.test(x, alternative="greater", mu=0.0, conf.level=0.99)
```

One Sample t-test

```
data: x
t = -0.5056, df = 18, p-value = 0.6904
alternative hypothesis: true mean is greater than 0
99 percent confidence interval:
 -16.55349      Inf
sample estimates:
mean of x
-2.736842

>
```



## 3 Example 3

```
> x = c(0, 1, -1, 2, -2, 3, 3, 2, -2, 0, -1, 5, 2, 1, -2, -1)
> t.test(x, alternative="two.sided", mu=0.0, conf.level=0.99)
```

One Sample t-test

```
data: x
t = 1.1941, df = 15, p-value = 0.251
alternative hypothesis: true mean is not equal to 0
99 percent confidence interval:
 -0.9173398  2.1673398
sample estimates:
mean of x
 0.625

>
```

Histogram of x

