```
> t.test(y1,y2,paired=TRUE)          # where y1 & y2 are numeric

# one sample t-test

> t.test(y,mu=3)                     # Ho: mu=3
```

We can use the var.equal = TRUE option to specify equal and a pooled variance estimate, use the alternative="less" or alternative="greater" option to specify a one tailed test.

```
> t.test(len ~ supp, data = ToothGrowth, alt = "greater", var.equal =
TRUE) > x <- rnorm(13, mean = 2, sd = 3)

> t.test(x, mu = 0, conf.level = 0.9, alternative = "greater")
```

One Sample t-test:-

Comparing the sample mean with a known value, when population variance is not known.

7.2.1. Experiments:

1. An outbreak of salmonella-related illness was attributed to ice produced at a certain factory. Scientists measured the level of Salmonella in 9 randomly sampled batches ice crean.The levels(in MPN/g) were:

0.593	0.142	0.329	0.691	0.231	0.793	0.519	0.392	0.418

   Is there evidence that the mean level pf Salmonella in ice cream greater than 0.3 MPN/g?

2. Suppose that 10 volunteers have taken an intelligence test; here are the results obtained. The average score of the entire population is 75 in the same test. Is there any significant difference (with a significance level of 95%) between the sample and population means, assuming that the variance of the population is not known.
   Scores: 65, 78, 88, 55, 48, 95, 66, 57, 79, 81
3. Comparing two independent sample means, taken from two populations with unknown variance.The following data shows the heights of individuals of two different countries with unknown population variances. Is there any significant difference b/n the average heights of two groups.

A:	175	168	168	190	156	181	182	175	174	179
B:	185	169	173	173	188	186	175	174	179	180