

```

> setwd("C:\\Users\\MCS\\OneDrive - Sri Lanka Institute of Information Technology\\Desktop\\IT24103399_Lab9")
> getwd()
[1] "C:/Users/MCS/OneDrive - Sri Lanka Institute of Information Technology/Desktop/IT24103399_Lab9"
>
> set.seed(123)
>
> sample_size <- 25
> mu <- 45
> sigma <- 2
> baking_times <- rnorm(sample_size, mean = mu, sd = sigma)
> print(baking_times)
[1] 43.87905 44.53965 48.11742 45.14102 45.25858 48.43013 45.92183 42.46988
[9] 43.62629 44.10868 47.44816 45.71963 45.80154 45.22137 43.88832 48.57383
[17] 45.99570 41.06677 46.40271 44.05442 42.86435 44.56405 42.94799 43.54222
[25] 43.74992
>
>
> t_test_result <- t.test(baking_times, mu = 46, alternative = "less")
> print(t_test_result)

```

One Sample t-test

```

data: baking_times
t = -2.8167, df = 24, p-value = 0.004776
alternative hypothesis: true mean is less than 46
95 percent confidence interval:
 -Inf 45.58124
sample estimates:
mean of x
44.93334

```

Environment	History	Connections	Tutorial
<div> <div> <div>Import Dataset</div> <div>141 MiB</div> </div> <div>List</div> </div>			
R - Global Environment			
Data			
t_test_result		List of 10	
Values			
baking_times	num [1:25] 43.9 44.5 48.1 45.1 45.3 ...		
iq_95th	124.672804404272		
lambda	0.333333333333333		
lower	10		
max_time	40		
mean_iq	100		
min_time	0		
mu	45		
prob	0.486582880967408		
prob_above_130	0.0227501319481792		