

## Exercise

```
IT24100599.R ×
Source on Save
Run
Source

1 setwd("C:\\Users\\Vinod Madhuranga\\Desktop\\IT24100599")
2
3 # Exercise
4
5 # i.
6 set.seed(123)
7 baking_time <- rnorm(25, mean = 45, sd = 2)
8 print(baking_time)
9
10
11 # ii.
12 t_test_result <- t.test(baking_time, mu = 46, alternative = "less")
13 print(t_test_result)
14
```

```
Console Terminal × Background Jobs ×
R · R 4.5.1 · C:/Users/Vinod Madhuranga/Desktop/IT24100599/
> setwd("C:\\Users\\Vinod Madhuranga\\Desktop\\IT24100599")
>
> # Exercise
>
> # i.
> set.seed(123)
> baking_time <- rnorm(25, mean = 45, sd = 2)
> print(baking_time)
[1] 43.87905 44.53965 48.11742 45.14102 45.25858 48.43013 45.92183 42.46988 43.62629
[10] 44.10868 47.44816 45.71963 45.80154 45.22137 43.88832 48.57383 45.99570 41.06677
[19] 46.40271 44.05442 42.86435 44.56405 42.94799 43.54222 43.74992
>
>
> # ii.
> t_test_result <- t.test(baking_time, mu = 46, alternative = "less")
> print(t_test_result)

One Sample t-test

data:  baking_time
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
```