

Sri Lanka Institute of Information Technology



Lab Submission Lab sheet 09

IT24100623

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Probability and Statistics|IT2120

B.Sc. (Hons) in Information Technology

Answers

```
1 setwd("C:\\Users\\Harindu\\Desktop\\IT24100623")
2 getwd()
3
4 set.seed(123)
5 bake_time<-rnorm(25,mean=45,sd=2)
6 print(bake_time)
7
8 t.test(bake_time,mu=46,alternative = "less",conf.level = 0.95)
9 print(t.test)
10 |
```

```
> setwd("C:\\Users\\Harindu\\Desktop\\IT24100623")
> getwd()
[1] "C:/Users/Harindu/Desktop/IT24100623"
>
> set.seed(123)
> bake_time<-rnorm(25,mean=45,sd=2)
> print(bake_time)
[1] 43.87905 44.53965 48.11742 45.14102 45.25858 48.43013 45.92183 42.46988 43.62629 44.10868
[11] 47.44816 45.71963 45.80154 45.22137 43.88832 48.57383 45.99570 41.06677 46.40271 44.05442
[21] 42.86435 44.56405 42.94799 43.54222 43.74992
>
> t.test(bake_time,mu=46,alternative = "less",conf.level = 0.95)
```

One Sample t-test

```
data:  bake_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

> print(t.test)
function (x, ...)
  UseMethod("t.test")
<bytecode: 0x000001bf518b6280>
<environment: namespace:stats>
> |
```

