

Sri Lanka Institute of Information Technology



Lab Submission
Lab Sheet 09

IT 24103866

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Probability and Statistics | IT2120

B.Sc. (Hons) in Information Technology

```

1 setwd("C:\\Users\\User\\OneDrive\\Desktop\\IT24103866")
2 getwd()
3
4 #1.1
5 backing_time <- rnorm(25,mean =45, sd= 2)
6 print(backing_time)
7
8 #1.2
9 t.test(backing_time,mu=46,alternative = 'less')

```

```

> setwd("C:\\Users\\User\\OneDrive\\Desktop\\IT24103866")
> getwd()
[1] "C:/Users/User/OneDrive/Desktop/IT24103866"
> #1.1
> backing_time <- rnorm(25,mean =45, sd= 2)
> print(backing_time)
 [1] 42.14990 45.29903 42.88814 42.21809 46.40810 47.54986 46.77780 44.75960 44.08724
[10] 45.72983 42.35626 46.12908 49.05359 45.40190 45.82543 45.04064 46.30472 46.78218
[19] 46.84468 45.83310 46.07347 44.84344 43.18062 47.97169 44.83214
>
> #1.2
> t.test(backing_time,mu=46,alternative = 'less')

```

One Sample t-test

```

data:  backing_time
t = -1.7389, df = 24, p-value = 0.04743
alternative hypothesis: true mean is less than 46
95 percent confidence interval:
 -Inf 45.9899
sample estimates:
mean of x
 45.37362

```