

PS lab 09

IT24103633

```
#Q1
```

```
#Part 1
```

```
y <- rnorm(24,mean =45,sd=2 )
```

```
y
```

```
> setwd("D:\\SLIIT\\Year 2 Sem 1\\PS\\WEEK10")
```

```
> y <- rnorm(24,mean =45,sd=2 )
```

```
> y <- rnorm(24,mean =45,sd=2 )
```

```
> y
```

```
[1] 43.47640 44.69384 45.99286 46.16105 48.25606 46.10494 46.55474 45.40817 47.53711 44.55679  
[11] 43.85958 43.61880 47.08529 46.90632 46.66669 42.79695 48.64278 46.15516 43.55567 46.18591  
[21] 48.70608 44.50771 46.48568 48.29074
```

```
#Part 2
```

```
t.test(y,mu=46,alternative ="less")
```

```
> t.test(y,mu=46,alternative ="less")
```

One Sample t-test

data: y

t = -0.21123, df = 23, p-value = 0.4173

alternative hypothesis: true mean is less than 46

95 percent confidence interval:

-Inf 46.53194

sample estimates:

mean of x

45.92522