IT24102315 – Abeyrathna G.M.H.D.

PS – Lab-09

01.

i.

```
set.seed(123)
bake_time <- rnorm(25, mean = 45, sd = 2)
print(bake_time)
```

```
> 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 47.44816
[12] 45.71963 45.80154 45.22137 43.88832 48.57383 45.99570 41.06677 46.40271 44.05442 42.86435 44.56405
[23] 42.94799 43.54222 43.74992
>
```

ii.

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

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

        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
```