IT24101987

Ps Lab 9

1.) Assume that the time taken to bake a batch of cookies is normally distributed with mean 45 minutes and standard deviation 2 minutes.

```r
setwd("C:\\Users\\USER\\OneDrive\\Desktop\\IT24101987")

#1 random sample of size 25
baking_times <- rnorm(25, mean = 45, sd = 2)

#2 Test whether the average baking time is less than 46 minutes at a 5% level of significance.
test_result <- t.test(baking_times, mu = 46, alternative = "less")

print(test_result)

|
```

```
        One Sample t-test

data:  baking_times
t = -1.8805, df = 24, p-value = 0.03611
alternative hypothesis: true mean is less than 46
95 percent confidence interval:
     -Inf 45.90839
sample estimates:
mean of x
 44.98453
```