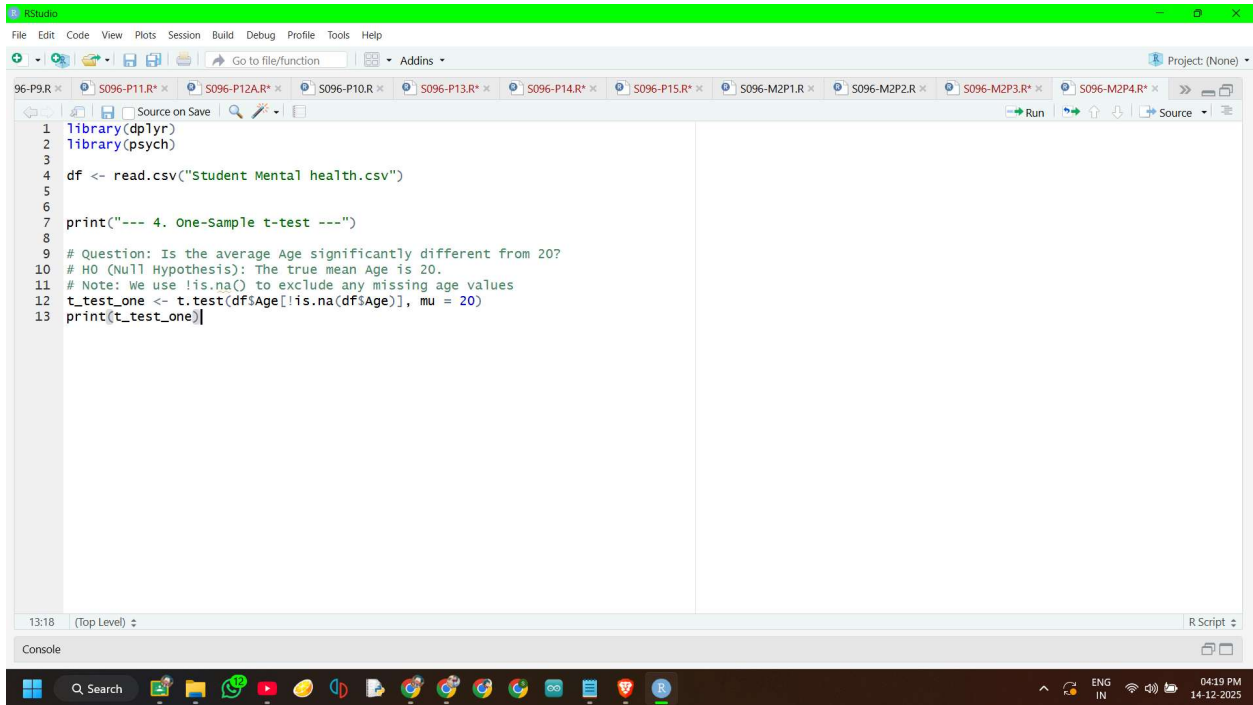


SHETH L.U.J. AND SIR M.V. COLLEGE

DATA ANALYSIS WITH R

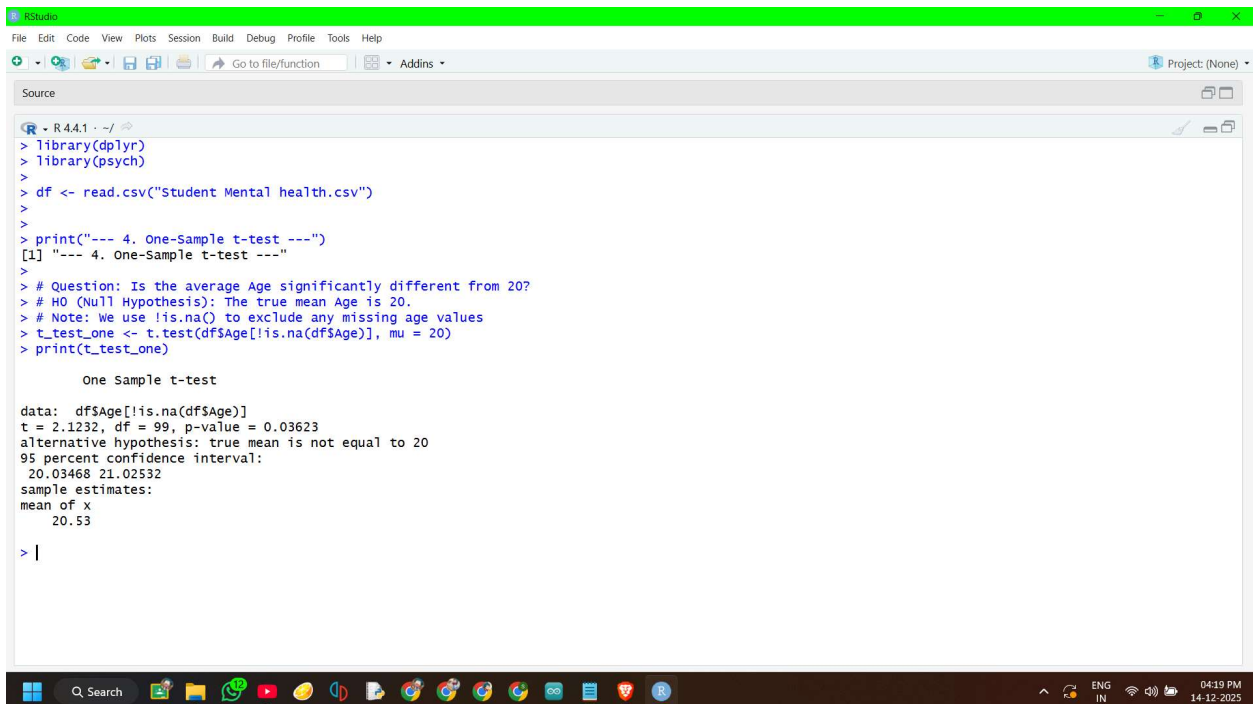
AIM: Performing one-sample t-tests using t.test().

CODE:



```
1 library(dplyr)
2 library(psych)
3
4 df <- read.csv("Student Mental health.csv")
5
6
7 print("--- 4. One-Sample t-test ---")
8
9 # Question: Is the average Age significantly different from 20?
10 # H0 (Null Hypothesis): The true mean Age is 20.
11 # Note: We use !is.na() to exclude any missing age values
12 t_test_one <- t.test(df$Age[!is.na(df$Age)], mu = 20)
13 print(t_test_one)
```

OUTPUT:



```
> library(dplyr)
> library(psych)
>
> df <- read.csv("Student Mental health.csv")
>
> print("--- 4. One-Sample t-test ---")
[1] "--- 4. One-Sample t-test ---"
>
> # Question: Is the average Age significantly different from 20?
> # H0 (Null Hypothesis): The true mean Age is 20.
> # Note: We use !is.na() to exclude any missing age values
> t_test_one <- t.test(df$Age[!is.na(df$Age)], mu = 20)
> print(t_test_one)

One Sample t-test

data:  df$Age[!is.na(df$Age)]
t = 2.1232, df = 99, p-value = 0.03623
alternative hypothesis: true mean is not equal to 20
95 percent confidence interval:
 20.03468 21.02532
sample estimates:
mean of x
 20.53
> |
```