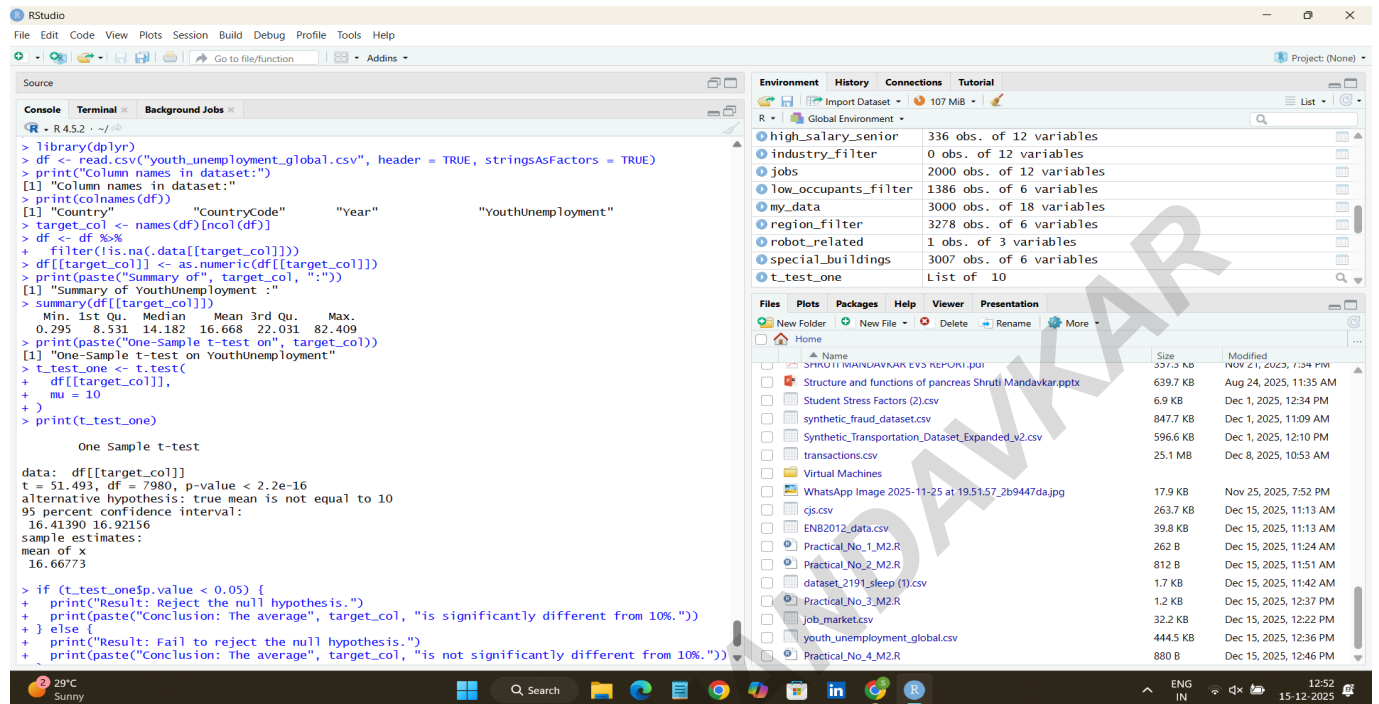


SHETH L.U.J. AND SIR M.V. COLLEGE

Aim:- Performing One Sample t-Test Using t.Test() in R

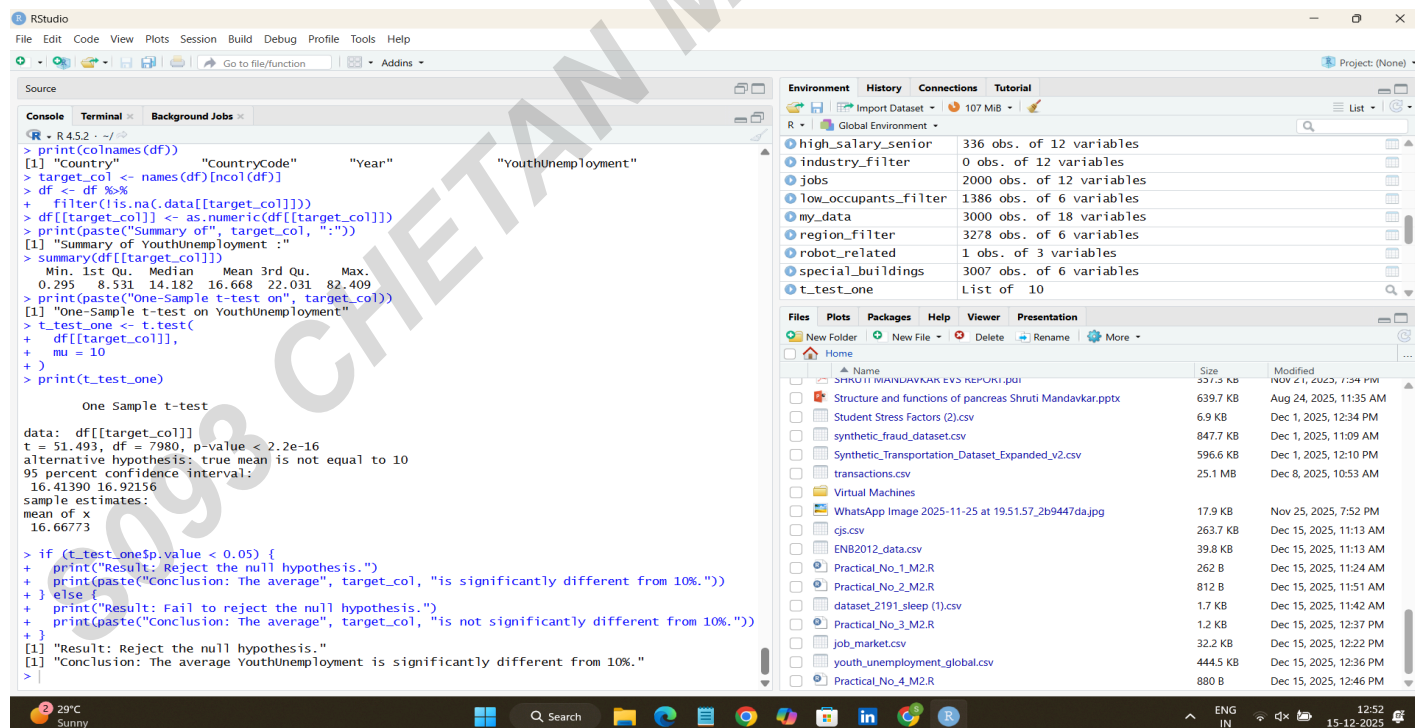


```
> library(dplyr)
> df <- read.csv("youth_unemployment_global.csv", header = TRUE, stringsAsFactors = TRUE)
> print("Column names in dataset:")
[1] "Column names in dataset:"
> print(colnames(df))
[1] "Country" "CountryCode" "Year" "YouthUnemployment"
> target_col <- names(df)[ncol(df)]
> df <- df %>%
+ filter(!is.na(.data[[target_col]]))
> df[[target_col]] <- as.numeric(df[[target_col]])
> print(paste("Summary of", target_col, ":"))
[1] "Summary of YouthUnemployment :"
> summary(df[[target_col]])
Min. 1st Qu. Median Mean 3rd Qu. Max.
0.295 8.531 14.182 16.668 22.031 82.409
> print(paste("One-Sample t-test on", target_col))
[1] "One-Sample t-test on YouthUnemployment"
> t_test_one <- t.test(
+ df[[target_col]],
+ mu = 10
+ )
> print(t_test_one)

One Sample t-test

data: df[[target_col]]
t = 51.493, df = 7980, p-value < 2.2e-16
alternative hypothesis: true mean is not equal to 10
95 percent confidence interval:
 16.41390 16.92156
sample estimates:
mean of x
16.66773

> if (t_test_one$p.value < 0.05) {
+ print("Result: Reject the null hypothesis.")
+ print(paste("Conclusion: The average", target_col, "is significantly different from 10%."))
+ } else {
+ print("Result: Fail to reject the null hypothesis.")
+ print(paste("Conclusion: The average", target_col, "is not significantly different from 10%."))
+ }
```



```
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ROLL NO. S093

SUBJECT:- Data Analysis With SAS / SPSS / R