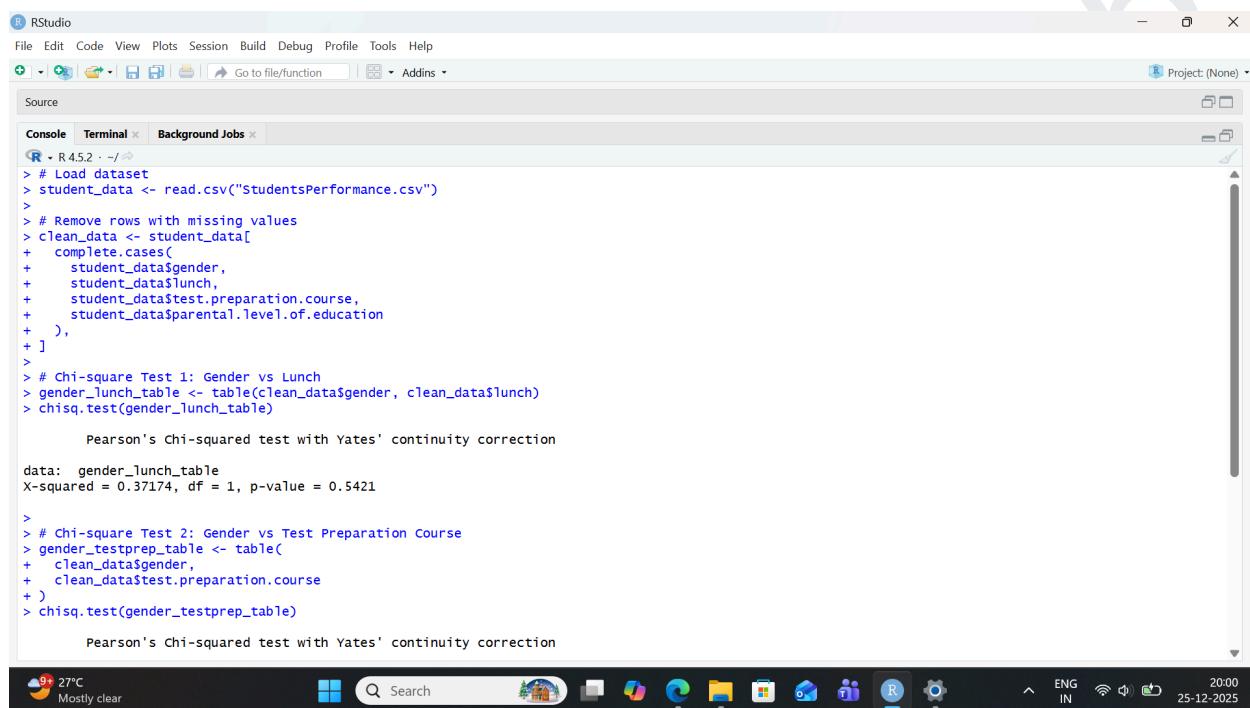


## **Practical No 9 Module II**

**Aim :** Conducting Chi-square tests using chisq.test() (R)

**Output :**



The screenshot shows the RStudio interface with the following R code in the Console tab:

```
R - R 4.5.2 · ~/r
> # Load dataset
> student_data <- read.csv("StudentsPerformance.csv")
>
> # Remove rows with missing values
> clean_data <- student_data[
+   complete.cases(
+     student_data$gender,
+     student_data$lunch,
+     student_data$test.preparation.course,
+     student_data$parental.level.of.education
+   ),
+ ]
>
> # Chi-square Test 1: Gender vs Lunch
> gender_lunch_table <- table(clean_data$gender, clean_data$lunch)
> chisq.test(gender_lunch_table)

Pearson's Chi-squared test with Yates' continuity correction

data: gender_lunch_table
X-squared = 0.37174, df = 1, p-value = 0.5421

>
> # Chi-square Test 2: Gender vs Test Preparation Course
> gender_testprep_table <- table(
+   clean_data$gender,
+   clean_data$test.preparation.course
+ )
> chisq.test(gender_testprep_table)

Pearson's Chi-squared test with Yates' continuity correction
```

The RStudio interface includes tabs for Source, Terminal, and Background Jobs. The status bar at the bottom shows weather (27°C, Mostly clear), system icons, and the date/time (25-12-2025, 20:00).

# **SHETH L.U.J. AND SIR M.V. COLLEGE OF ARTS SCIENCE AND COMMERCE**

## **SUBJECT : R Programming**



RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Source

Console Terminal Background Jobs

R 4.5.2 · ~/

```
data: gender_lunch_table
X-squared = 0.37174, df = 1, p-value = 0.5421

> # Chi-square Test 2: Gender vs Test Preparation Course
> gender_testprep_table <- table(
+   clean_data$gender,
+   clean_data$test.preparation.course
+ )
> chisq.test(gender_testprep_table)

Pearson's Chi-squared test with Yates' continuity correction

data: gender_testprep_table
X-squared = 0.015529, df = 1, p-value = 0.9008

> # Chi-square Test 3: Parental Education vs Lunch
> parentedu_lunch_table <- table(
+   clean_data$parental.level.of.education,
+   clean_data$lunch
+ )
> chisq.test(parentedu_lunch_table)

Pearson's Chi-squared test

data: parentedu_lunch_table
X-squared = 1.1113, df = 5, p-value = 0.9531
> |
```

Project: (None)

27°C Mostly clear

Search

ENG IN 20:00 25-12-2025