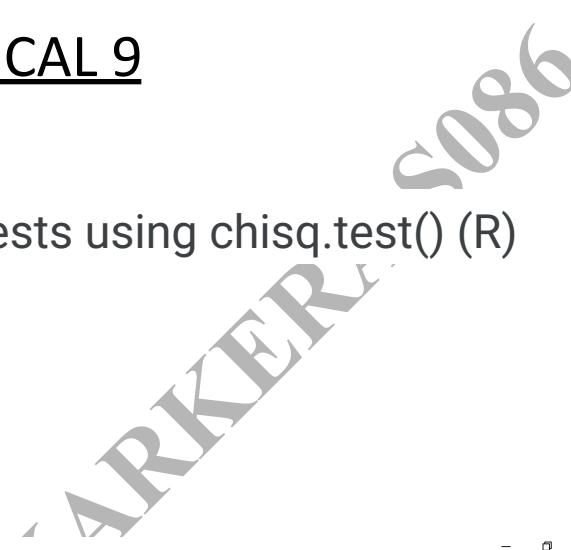


# SHETH L.U.J AND SIR M.V. COLLEGE

SUBJECT NAME:data analysis

## PRACTICAL 9

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



```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
R Scripts > Untitled > S086 Prac 7.R > S086 Prac 8.R > S086 Prac 9.R > AI Impact on Jobs 2030 > Run Source
1 library(tidyverse)
2
3 data <- read.csv("~/S086 R Prac 7 to 9/AI_Impact_on_Jobs_2030.csv")
4
5 median_salary <- median(data$Average_Salary, na.rm = TRUE)
6 median_exposure <- median(data$AI_Exposure_Index, na.rm = TRUE)
7
8 R452 ->
9 > library(tidyverse)
10 > data <- read.csv("~/S086 R Prac 7 to 9/AI_Impact_on_Jobs_2030.csv")
11 >
12 > median_salary <- median(data$Average_Salary, na.rm = TRUE)
13 > median_exposure <- median(data$AI_Exposure_Index, na.rm = TRUE)
14 >
15 > data$Salary_Cat <- ifelse(data$Average_Salary >= median_salary, "High", "Low")
16 > data$Exposure_Cat <- ifelse(data$AI_Exposure_Index >= median_exposure, "High", "Low")
17 >
18 > contingency_table <- table(data$Salary_Cat, data$Exposure_Cat)
19 > print("Contingency Table:")
20 [1] "Contingency Table:"
21 > print(contingency_table)
22
23      High Low
24 High 752 748
25 Low   779 721
26 >
27 > test_result <- chisq.test(contingency_table)
28 > print(test_result)
29
30 Pearson's Chi-squared test with Yates' continuity correction
31
32 data: contingency_table
33 X-squared = 0.90172, df = 1, p-value = 0.3423
34
```

The RStudio interface shows an R script named 'Untitled' containing code to load tidyverse, read a CSV file, calculate medians, create categorical variables for salary and exposure, and perform a Chi-square test on a contingency table. The environment pane shows variables like model, ss\_between\_df, test\_result, and values for df\_between, f\_stat, grand\_mean, k, median\_exposure, and median\_salary. The plots pane shows a histogram of the data. The bottom status bar indicates TCS -1.88%, ENG 08-01-2026, and 10:03.

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S086

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