**AMERICAN INTERNATIONALA close up of a sign

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**UNIVERSITY-BANGLADESH**

**Faculty of Science and Technology**

**Assignment Cover Sheet**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Assignment Title: | Chi Square method test for Mental Health Dataset | | | |
| Assignment No: | 01 | | Date of Submission: | 24 April 2024 |
| Course Title: | Introduction to Data Science | | | |
| Course Code: | CSC4180 | | Section: | B |
| Semester: | Spring | 2023-24 | Course Teacher: | **Tohedul Islam** |

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| **1** | **Avijit Saha Anto** | **21-44630-1** | **BSc [CSE]** |  |

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| --- | --- | --- |
| ***Faculty use only*** | | |
| FACULTYCOMMENTS | **Marks Obtained** |  |
|  |
|  |
|  | **Total Marks** |  |

**IMPORTING THE DATASET**

**Code:**

dataset <- read.csv("E:/Data Science Midterm Project/Mental Health Dataset.csv",na.strings=c(("")),header= TRUE, sep = ",")

dataset

**Output:**

A screenshot of a computer

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**APPLYING ‘CHI SQUARED’ METHOD**

* **Gender ~ treatment**

**Code:**

cont\_table <- table(dataset$Gender, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **Country ~ treatment**

**Code:**

cont\_table <- table(dataset$Country, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **Occupation ~ treatment**

**Code:**

cont\_table <- table(dataset$Occupation, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **self\_employed ~ treatment**

**Code:**

cont\_table <- table(dataset$self\_employed, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **family\_history ~ treatment**

**Code:**

cont\_table <- table(dataset$family\_history, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **Growing\_Stress ~ treatment**

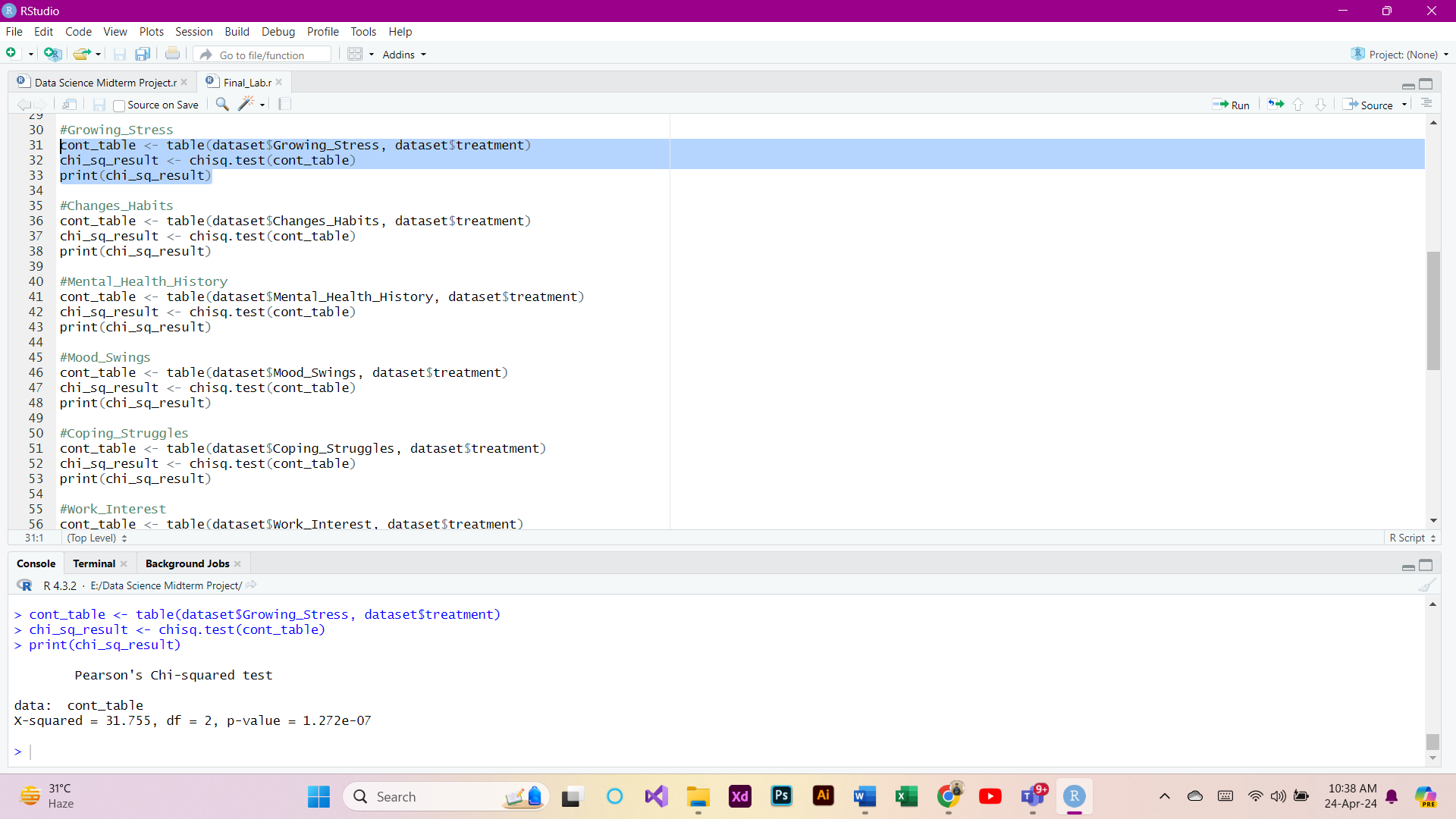
**Code:**

cont\_table <- table(dataset$Growing\_Stress, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**



* **Changes\_Habits ~ treatment**

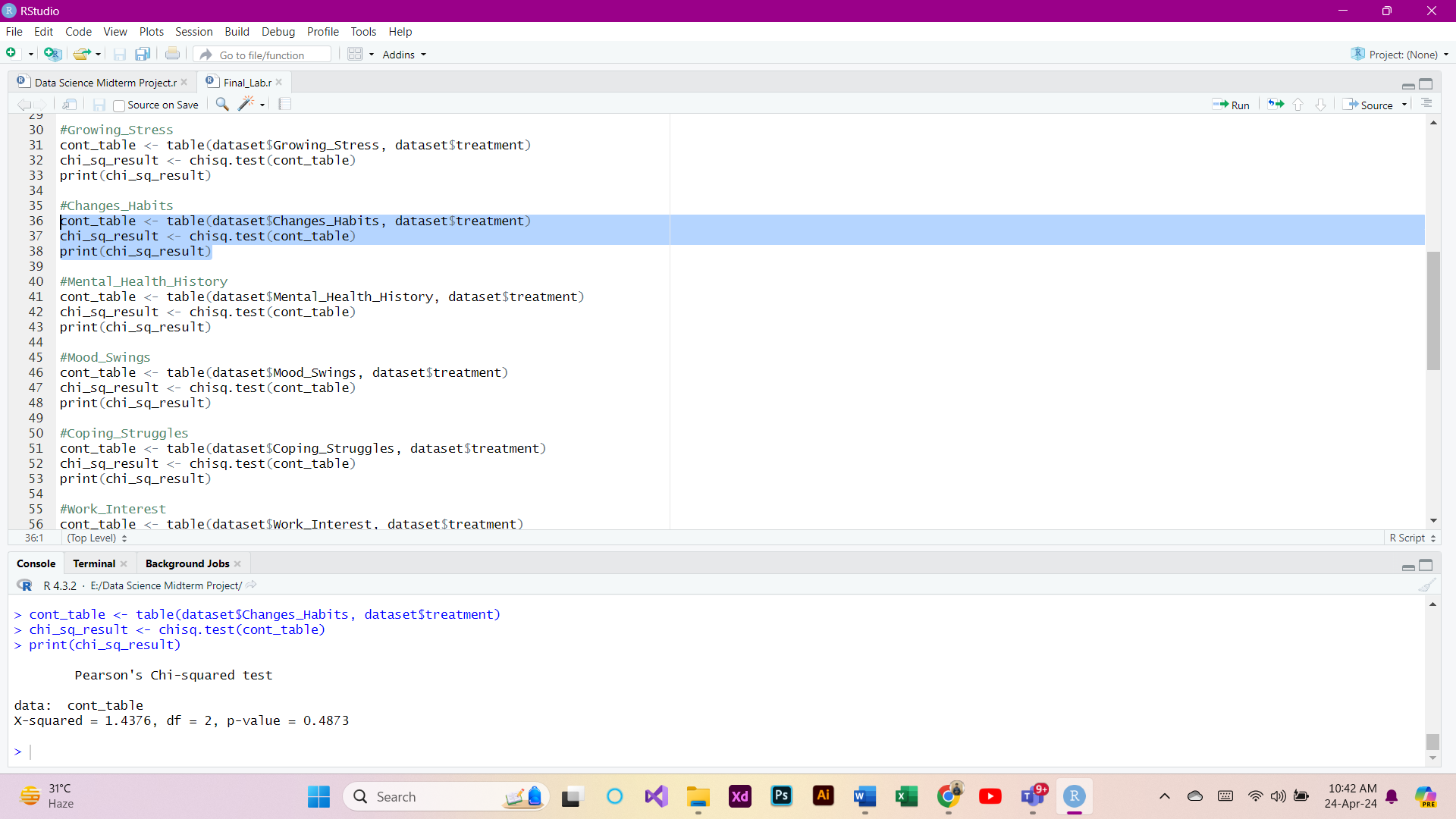
**Code:**

cont\_table <- table(dataset$Changes\_Habits, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**



* **Mental\_Health\_History ~ treatment**

**Code:**

cont\_table <- table(dataset$Mental\_Health\_History, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **Mood\_Swings ~ treatment**

**Code:**

cont\_table <- table(dataset$Mood\_Swings, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **Coping\_Struggles ~ treatment**

**Code:**

cont\_table <- table(dataset$Coping\_Struggles, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **Work\_Interest ~ treatment**

**Code:**

cont\_table <- table(dataset$Work\_Interest, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **Social\_Weakness ~ treatment**

**Code:**

cont\_table <- table(dataset$Social\_Weakness, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **mental\_health\_interview ~ treatment**

**Code:**

cont\_table <- table(dataset$mental\_health\_interview, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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* **care\_options ~ treatment**

**Code:**

cont\_table <- table(dataset$care\_options, dataset$treatment)

chi\_sq\_result <- chisq.test(cont\_table)

print(chi\_sq\_result)

**Output:**

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