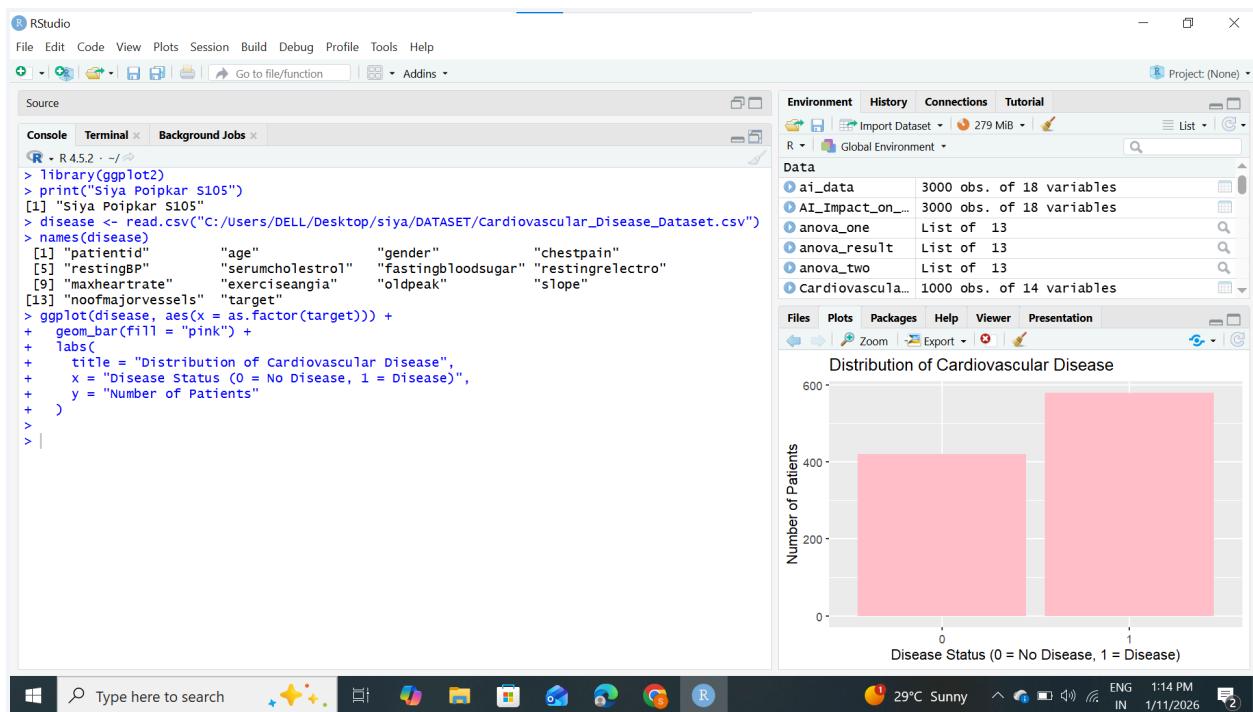


MVLU COLLEGE
R PROGRAMMING
PRACTICAL NO. 10 TO 12 (MODULE 2)

AIM : 10: Creating graphical reports using ,ggplot2 (R).

```
library(ggplot2)
print("Siya Poipkar S105")
disease <- read.csv("C:/Users/DELL/Desktop/siya/DATASET/Cardiovascular_Disease_Dataset.csv")
names(disease)

ggplot(disease, aes(x = as.factor(target))) +
  geom_bar(fill = "pink") +
  labs(
    title = "Distribution of Cardiovascular Disease",
    x = "Disease Status (0 = No Disease, 1 = Disease)",
    y = "Number of Patients"
  )
```



MVLU COLLEGE
R PROGRAMMING
PRACTICAL NO. 10 TO 12 (MODULE 2)

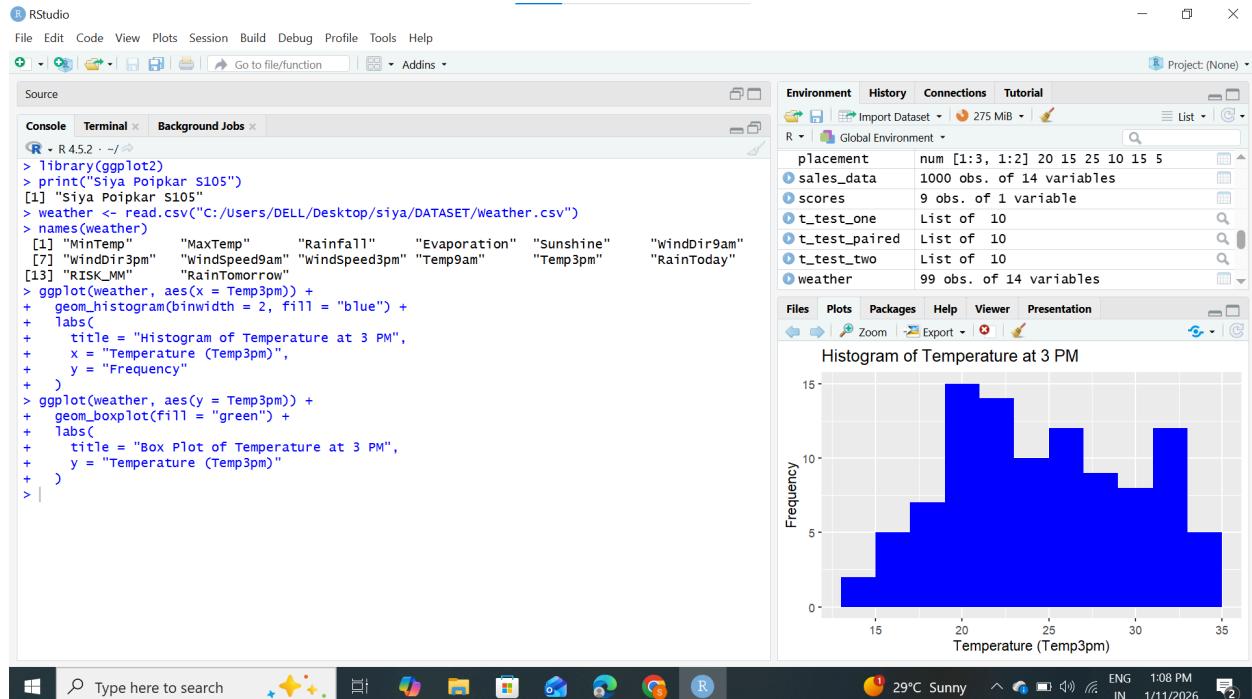
AIM 11: Generating histograms and box plots using ggplot2 (R).

```
library(ggplot2)
print("Sya Poipkar S105")
weather <- read.csv("C:/Users/DELL/Desktop/siya/DATASET/Weather.csv")
names(weather)

ggplot(weather, aes(x = Temp3pm)) +
  geom_histogram(binwidth = 2, fill = "blue") +
  labs(
    title = "Histogram of Temperature at 3 PM",
    x = "Temperature (Temp3pm)",
    y = "Frequency"
  )

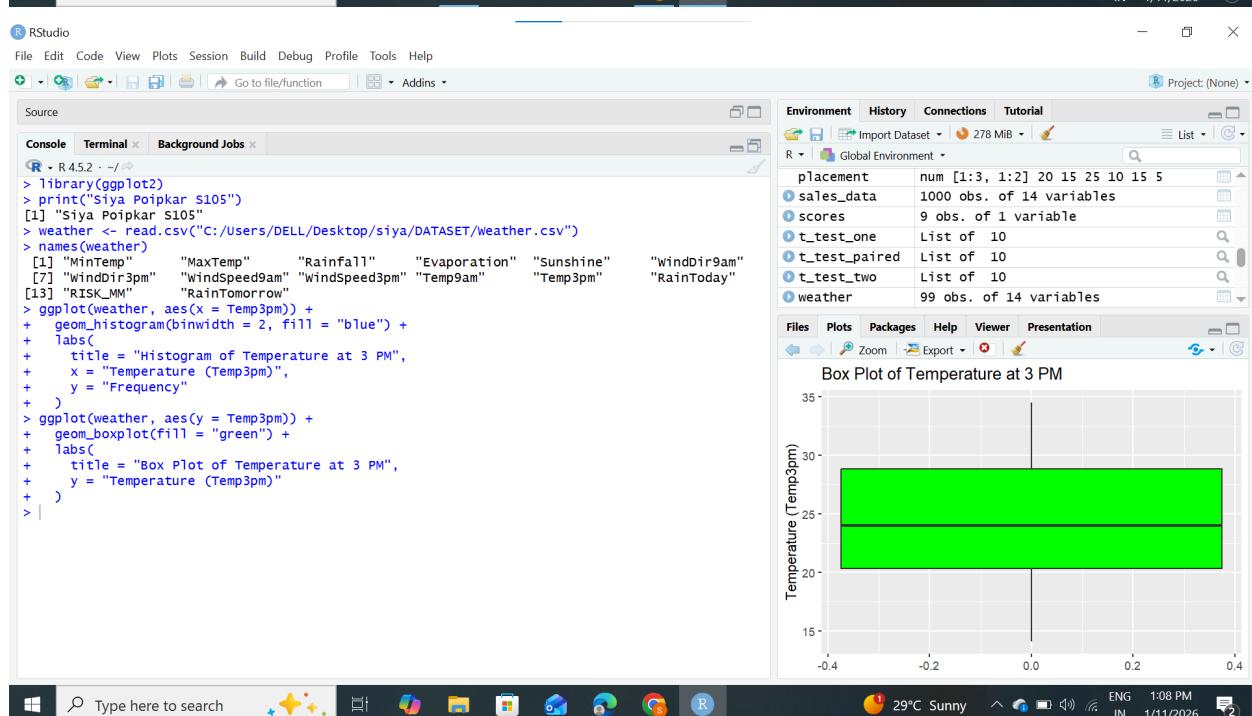
ggplot(weather, aes(y = Temp3pm)) +
  geom_boxplot(fill = "green") +
  labs(
    title = "Box Plot of Temperature at 3 PM",
    y = "Temperature (Temp3pm)"
  )
```

MVLU COLLEGE
R PROGRAMMING
PRACTICAL NO. 10 TO 12 (MODULE 2)



The screenshot shows the RStudio interface with the following details:

- Console Tab:** Displays R code for reading a CSV file and creating histograms and box plots.
- Environment Tab:** Shows global variables like placement, sales_data, scores, t_test_one, t_test_paired, t_test_two, and weather.
- Plots Tab:** Displays a histogram titled "Histogram of Temperature at 3 PM". The x-axis is "Temperature (Temp3pm)" ranging from 15 to 35, and the y-axis is "Frequency" ranging from 0 to 15. The distribution is roughly bell-shaped.
- System Taskbar:** Shows the Windows taskbar with various pinned icons and system status.



The screenshot shows the RStudio interface with the following details:

- Console Tab:** Displays the same R code as the first screenshot.
- Environment Tab:** Shows the same global variables.
- Plots Tab:** Displays a box plot titled "Box Plot of Temperature at 3 PM". The y-axis is "Temperature (Temp3pm)" ranging from 15 to 35. The box plot shows a median around 24, an interquartile range from approximately 21 to 28, and whiskers extending from about 15 to 34.
- System Taskbar:** Shows the Windows taskbar with various pinned icons and system status.

MVLU COLLEGE
R PROGRAMMING
PRACTICAL NO. 10 TO 12 (MODULE 2)

AIM 12: Generating correlation matrices using `cor()` (R).

```
print("Sya Poipkar S105")
mall <- read.csv("C:/Users/DELL/Desktop/siya/DATASET/Mall_Customers.csv")

mall_numeric <- mall[, c("Age", "Annual.Income..k..", "Spending.Score..1.100.")]

cor_matrix <- cor(mall_numeric)

print(cor_matrix)
```

