CODE:

# Load the dataset

facebook\_data<read.csv("C:\\Users\\vyshn\\OneDrive\\Desktop\\pseudo\_faceb

ook.csv")

# Summary statistics

summary(facebook\_data)

# Handle missing values

facebook\_data <- na.omit(facebook\_data)

# Convert date of birth to Date format

facebook\_data$DOB<-as.Date(paste(facebook\_data$dob\_year,"-

"facebook\_data$dob\_month, "-", facebook\_data$dob\_day), format="%Y-%m-

%d")

# Age distribution

hist(facebook\_data$age, main = "Age Distribution", xlab = "Age")

# Gender distribution

barplot(table(facebook\_data$gender), main = "Gender Distribution")

# Tenure distribution

hist(facebook\_data$tenure, main = "Tenure Distribution", xlab = "Tenure

(Days)")

# Scatter plot of friend count vs friendships initiated

plot(facebook\_data$friend\_count, facebook\_data$friendships\_initiated,

main = "Friend Count vs Friendships Initiated",

xlab = "Friend Count", ylab = "Friendships Initiated")

#Age distribution by gender

library(ggplot2)

ggplot(facebook\_data, aes(x = age, fill = gender)) +

geom\_histogram(binwidth = 5, position = "dodge") +

labs(title = "Age Distribution by Gender", x = "Age", y = "Count") +

scale\_fill\_manual(values = c("male" = "blue", "female" = "pink")

# Scatter plot of friendships initiated vs. likes received

plot(facebook\_data$friendships\_initiated, facebook\_data$likes\_received,

main = "Friendships Initiated vs. Likes Received",

xlab = "Friendships Initiated", ylab = "Likes Received")

# Boxplot of tenure by gender

boxplot(tenure ~ gender, data = facebook\_data,

main = "Tenure Distribution by Gender",

xlab = "Gender", ylab = "Tenure (Days)")

# Scatter plot of friend count vs. likes received

plot(facebook\_data$friend\_count, facebook\_data$likes\_received,

main = "Friend Count vs. Likes Received",

xlab = "Friend Count", ylab = "Likes Received")

# t-test for comparing likes received between genders

t.test(likes\_received ~ gender, data = facebook\_data)