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library(dplyr)

library(ggplot2)

purchase\_data <- data.frame(

CustomerID = c(101,102,103,104,105),

PurchaseAmount = c(150,200,120,300,80)

)

mean\_purchase <- mean(purchase\_data$PurchaseAmount)

median\_purchase <- median(purchase\_data$PurchaseAmount)

sd\_purchase <- sd(purchase\_data$PurchaseAmount)

q1\_purchase <- quantile(purchase\_data$PurchaseAmount, probs = 0.25)

q3\_purchase <- quantile(purchase\_data$PurchaseAmount, probs = 0.75)

cat("Mean Purchase Amount:", mean\_purchase, "\n")

cat("Median Purchase Amount:", median\_purchase, "\n")

cat("Standard Deviation of Purchase Amounts:", sd\_purchase, "\n")

cat("1st Quartile of Purchase Amounts:", q1\_purchase, "\n")

cat("3rd Quartile of Purchase Amounts:", q3\_purchase, "\n")

# Load ggplot2 library

library(ggplot2)

# Create histogram of PurchaseAmount

ggplot(purchase\_data, aes(x = PurchaseAmount)) +

geom\_histogram(binwidth = 50, fill = "blue", color = "black") +

labs(title = "Purchase Amount Distribution", x = "Amount", y = "Frequency")