Author:Subash Neupane

```r
set.seed(123) # Set a seed for reproducibility
X <- rnorm(1000, mean = 50, sd = 10) # Group X with 1000 points
Y <- rnorm(300, mean = 52, sd = 10)  # Group Y with 300 points


pdf("assignment7.pdf")
plot(X, col = 'blue', main = "Scatter Plot of Groups X and Y", xlab =
 "Index", ylab = "Value", pch = 16)
points(Y, col = 'red', pch = 16)
legend("topright", legend = c("Group X", "Group Y"), col = c("blue",
 "red"), pch = 16)
dev.off()

# Perform a t-test to compare means of X and Y
t_test_result <- t.test(X, Y)
p_value <- t_test_result$p.value

# Print the p-value
print(paste("The p-value of the t-test is:", p_value))
```