Assignment 5\_2

1. Calculate the P Value for the test in Problem 2.

2. How do you test the proportions and compare against hypothetical props? Test Hypothesis: proportion

of automatic cars is 40%.

Answer=

X <- data.frame(row.names(mtcars), mtcars$am)  
X  
  
p0 = 0.4  
Total = nrow(X)  
aut = sum(mtcars$am)  
  
p\_hat = aut / Total  # Sample proportion  
  
# Test statistic  
z = (p\_hat - p0) / sqrt((p0\*(1-p0))/Total)  
z  
prob = pnorm(z, 0, 1)

prob #answer for (1)