# 1.1

vote1 <- wpull('vote1')

model1 <- lm(voteA~log(expendA)+log(expendB)+prtystrA,data=vote1)

summary (model1)

# voteA = 45.087 + 6.08136\*log(expendA) -6.6156\*log(expendB) + 0.15201(prtystrA)

# B1 = 6.08136

# for every 1 increase in the expenditure A the voteA increases by 6.08136%

# when the other factors are not considered or they are null

#1.2

# The Null hypothesis is that 1% increase in A expenditures is offset by a 1% increase in B expenditures.

# The Null Hypothesis is true

# Alternative Hypothesis Ha : B1 + B2 not equal to 0

#1.3

# voteA=45.09 + 6.08136log(expendA) - 6.615log(expendB) + 0.15201prtystrA

# ExpenditureA and ExpenditureB both have t- stat that is significant.

# part(ii) analysis is required.

#1.4

summary(lm(voteA~log(expendA)+I(log(expendA)-log(expendB))+prtystrA,data=vote1))

# null hypothesis equation : voteA= 45.08 - 0.53log(expendA) + 6.6156(log(expendA) - log(expendB)) + 0.15201prtystrA

#t value = -1.002

#1.5

#We cannot reject the null hypothesis

