setwd("M:/SCMT 650/project")

library(ISLR)

library("readxl")

library(leaps)

hospital<-read\_xlsx("Final Data\_Report 3.xlsx")

set.seed(1)

train = sample(1:nrow(hospital), nrow(hospital)/2)

colnames(hospital, do.NULL = FALSE)

colnames(hospital) <- c("TypeA","SourceA","Discharged","LengthStay","Age","RiskMortality","IllnessSev","FRisk","Beds")

#forward stepwise

regfit.fwd=regsubsets(hospital$FRisk~., data=hospital, nvmax=19,method="forward")

summary(regfit.fwd)

#backward stepwise

regfit.back=regsubsets(hospital$FRisk~., data=hospital, nvmax=19,method="backward")

summary(regfit.back)

#best subset selection

regfit.best=regsubsets(hospital$FRisk~., data=hospital, nvmax=19)

summary(regfit.best)