claimants<-read.csv("/Volumes/Data/Course Content/DS content/Logistic Regression/claimants.csv")

#Finding null values

sum(is.na(claimants))

#Removing null values- na.omit(dataset)

claimants <- na.omit(claimants)

# Logistic Regression

#glm(y~x,family="bin....)

logit<-glm(ATTORNEY ~ factor(CLMSEX) + factor(CLMINSUR) + factor(SEATBELT)

+ CLMAGE + LOSS,family= "binomial",data=claimants)

summary(logit)

# Confusion Matrix Table

#predict(modelobject,testdataset)

prob=predict(logit,type=c("response"),claimants)

#table(dataframe1,dataframe2) ..to create 2X2 matrix

confusion<-table(prob>0.5,claimants$ATTORNEY)

confusion

# Model Accuracy

#adding diagonal elements in the confusion matrix

Accuracy<-sum(diag(confusion))/sum(confusion)

Accuracy