> mydata<-read.csv(file="/Users/poorva/Desktop/issdata.csv",header=TRUE, sep=",") > mydatatest<-read.csv(file="/Users/poorva/Desktop/issdatatest.csv",header=TRUE, sep=",")  
 > normalize<- function(x){

+ return((x-min(x))/(max(x)-min(x)))}

>  maxmindf<- as.data.frame(lapply(mydata, normalize))

>  trainset<- maxmindf[1:1000,]

>  testset<- maxmindf[1001:1130,]

>  library(neuralnet)  
>nn=neuralnet(Label~Frame\_size+Epoch\_time+Time\_delta\_from\_previous\_captured\_ pkt+Coloring\_rule\_name+len+File\_data+Total\_length+Time\_since\_previous\_frame\_ in\_this\_tcp\_stream+Tcp\_payload,rep=2,hidden=2,data=trainset,linear.output=FALSE ,threshold=0.1,startweights=c(0.98,0.27,0.353,0.475),algorithm="backprop",learningr ate=0.01)

> nn$result.matrix

> temp\_test<- subset(testset,select=c("Frame\_size","Epoch\_time","Time\_delta\_from\_previous\_capt ured\_pkt","Coloring\_rule\_name","len","File\_data","Total\_length","Time\_since\_previ ous\_frame\_in\_this\_tcp\_stream","Tcp\_payload"))  
> prediction<-compute(nn,temp\_test[1:9])  
> prediction<-prediction$net.result  
> prediction

> actual<-testset$Label

> actual

> MSE<-sum((prediction-actual)^2)/nrow(mydatatest)

> MSE

> nn.results<-compute(nn, temp\_test)

> results<- data.frame(actual testset$Label,prediction=nn.results$net.result)

> attach(roundedresultsdf)

> comparison=data.frame(prediction,actual,deviation)

> accuracy=1-abs(mean(deviation))  
 > accuracy