Model Building Techniques

**Simple Linear-Regression:**

model<- lm(output ~ input,data=filename)

**Multiple Linear-Regression:**

model <- (o/p ~ i/p1+ i/p2+ i/p3+.......+i/pn, data=filename)

**Logistic -Regression**

model <- glm(o/p ~factor(i/p)+ factor(i/p)+factor(i/p)……….i/p+i/p, family=binary/ordinal/nominal,data=filename)

**H-Clustering**

model <-hclust(filename,method="simple/complete")

**K-Means Clustering**

model <- kmeans(temp,4) #4 is number of clusters

**Principal Component Analysis**

model <- princomp(filename)

**K Nearest Neighbors**

model <- knn(filename$output~ ., data=filename,k=23)

**Support Vector Machine**

Model-linear <- svm(Filename$o/p-variable ~ ., data=Filename ,kernel = "linear")

Model-nonlinear <- ksvm(Filename$o/p-variable ~ ., data=Filename,kernel = "rbfdot/polydot/tanhdot/vanilladot/laplacedot/besseldot/anovadot/splinedot/matrix")

**NB-Classifier**

model <-naiveBayes(training$Class~.,data=training)

**Association Rules**

Model <-apriori(filename,parameter=list(support=0.0001,confidence =1))

Inspect(sort(model,by=”lift”))

**Decision Tree**

model <- C5.0(filename$output ~. ,data=filename)

**Random Forest**

model <- randomforest (filename$output ~. ,data=filename,tree=100)