

```
# KNN Method
```

```
bankloan <- read.csv("~/Desktop/BI Prac/BANK LOAN.csv")
```

```
library(caret)
```

```
index <- createDataPartition(bankloan$DEFAULTER, p=0.8, list=FALSE)
```

```
View(bankloan)
```

```
bankloan2 <- subset(bankloan, select = c(-DEFAULTER))
```

```
bankloan3 <- scale(bankloan2)
```

```
traindata <- bankloan3[index,]
```

```
testdata <- bankloan2[-index,]
```

```
#create class vector
```

```
Ytrain <- bankloan$DEFAULTER[index]
```

```
Ytest <- bankloan$DEFAULTER[-index]
```

```
library(class)
```

```
model_knn <- knn(traindata, testdata, k=23, cl= Ytrain)
```

```
table(Ytest, model_knn)
```

```
specificity(as.factor(Ytest),as.factor(model_knn),cutoff = 0.5)
```

```
sensitivity(as.factor(Ytest),as.factor(model_knn),cutoff = 0.5).
```