

1. Model Naive Bayes

```
set.seed(123)
nb <- train(Class ~ .,
             data=data_training,
             method="naive_bayes",
             trControl=fitControl)
```

2. Model Decision Tree

```
set.seed(123)
dt <- train(Class ~ .,
             data=data_training,
             method="rpart2",
             trControl=fitControl)
```

3. Model Neural Network

```
set.seed(123)
nn <- train(Class ~ .,
             data=data_training,
             method="nnet",
             trControl=fitControl)
```

4. Model Nearest Neighbour

```
set.seed(123)
knn <- train(Class ~ .,
             data=data_training,
             method="knn",
             trControl=fitControl)
```

5. Model SVM (linear kernel)

```
set.seed(123)
svm <- train(Class ~ .,
             data=data_training,
             method="svmLinear",
             trControl=fitControl)
```

```
resamps <- resamples(list("Naive Bayes"=nb,
                          "Decision Tree"=dt,
                          "Neural Network"=nn,
                          "Nearest Neighbour"=knn,
                          "SVM (linear kernel)"=svm))

summary(resamps)
```

```
##
## Call:
## summary.resamples(object = resamps)
##
## Models: Naive Bayes, Decision Tree, Neural Network, Nearest Neighbour, SVM (linear kernel)
## Number of resamples: 10
##
## Accuracy
##           Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## Naive Bayes  0.6417910 0.6716418 0.6940299 0.7021291 0.7126866 0.7941176
## Decision Tree 0.8235294 0.8544776 0.8964004 0.8974539 0.9253731 0.9701493
```

```

## Neural Network      0.9701493 0.9702590 0.9850746 0.9791703 0.9850746 0.9852941
## Nearest Neighbour  0.8805970 0.9107770 0.9402985 0.9360184 0.9665825 0.9701493
## SVM (linear kernel) 0.9701493 0.9702590 0.9850746 0.9806629 0.9850746 1.0000000
##
## NA's
## Naive Bayes        0
## Decision Tree      0
## Neural Network     0
## Nearest Neighbour  0
## SVM (linear kernel) 0
##
## Kappa
##
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
## Naive Bayes    0.1886983 0.2728508 0.2973763 0.3301961 0.3446200 0.5576208
## Decision Tree  0.5732218 0.6782198 0.7673132 0.7653352 0.8318554 0.9350775
## Neural Network 0.9323915 0.9328844 0.9665502 0.9533158 0.9670654 0.9674952
## Nearest Neighbour 0.7112069 0.7982758 0.8644097 0.8534526 0.9244398 0.9337945
## SVM (linear kernel) 0.9323915 0.9328844 0.9665502 0.9565920 0.9670654 1.0000000
##
## NA's
## Naive Bayes        0
## Decision Tree      0
## Neural Network     0
## Nearest Neighbour  0
## SVM (linear kernel) 0

```