CM_formanty_bez-kvantit_training

```
Call:
 randomForest(x = x, y = y, mtry = param$mtry)
               Type of random forest: classification
                     Number of trees: 500
No. of variables tried at each split: 2

        OOB estimate of  error rate: 37.18%
Confusion matrix:
     a    e    i    o   u class.error
a 2753  789   54  605  66   0.3548160
e  439 4307  729  542  82   0.2938187
i   29 1152 2380  195  77   0.3790764
o  489  701   81 2527 327   0.3873939
u   43  203  133  681 566   0.6519065
> 
```

CM_MFCC_bez-kvantit_training

```
Call:
 randomForest(x = x, y = y, mtry = param$mtry)
               Type of random forest: classification
                     Number of trees: 500
No. of variables tried at each split: 2

        OOB estimate of  error rate: 29.2%
Confusion matrix:
     a    e    i    o   u class.error
a 2909  799    7  393   4   0.2925584
e  389 4560  475  342  14   0.2110727
i   13 1042 2395  132  35   0.3378490
o  393  541   19 2773 113   0.2776765
u   17  123   42  606 699   0.5299260
> 
```

CM_MFCC_vc-kvantit_training

```
Call:
 randomForest(x = x, y = y, mtry = param$mtry)
               Type of random forest: classification
                     Number of trees: 500
No. of variables tried at each split: 2

        OOB estimate of  error rate: 35.21%
Confusion matrix:
      a  a:    e e:   i   i:    o o:   u u: class.error
a  1805 141  819  0   2    2  421  0   5  0   0.4350548
a:  275 566   64  0   0    0   13  0   0  0   0.3834423
e   276  22 4819  0 180  109  320  0  12  0   0.1601603
e:    4  10   28  0   0    0    0  0   0  0   1.0000000
i    10   0 1182  0 430  364  125  0   6  0   0.7968824
i:    0   0  114  0 184 1170    1  0  31  0   0.2200000
o   287  29  556  0   8    1 2792  1 101  0   0.2603974
o:   14   5    0  0   0    0   44  0   2  0   1.0000000
u    13   0  138  0  22    5  566  0 622  0   0.5446559
u:    0   0    2  0   2    2   28  0  87  1   0.9918033
> 
```

FINAL_formanty_bez-kvantit

```
Confusion Matrix and Statistics

          Reference
Prediction    a    e    i    o    u
         a  903  128   13  180   22
         e  269 1470  414  222   69
         i   21  231  761   22   38
         o  214  182   59  856  225
         u   15   21   30   95  188

Overall Statistics

               Accuracy : 0.6285
                 95% CI : (0.6167, 0.6401)
    No Information Rate : 0.3057
    P-Value [Acc > NIR] : < 2.2e-16

                  Kappa : 0.514

 Mcnemar's Test P-Value : < 2.2e-16

Statistics by Class:

                     Class: a Class: e Class: i Class: o Class: u
Sensitivity            0.6350   0.7234   0.5959   0.6225  0.34686
Specificity            0.9344   0.7890   0.9419   0.8710  0.97363
Pos Pred Value         0.7247   0.6015   0.7092   0.5573  0.53868
Neg Pred Value         0.9039   0.8663   0.9074   0.8985  0.94380
Prevalence             0.2139   0.3057   0.1921   0.2068  0.08153
Detection Rate         0.1358   0.2211   0.1145   0.1288  0.02828
Detection Prevalence   0.1874   0.3676   0.1614   0.2310  0.05250
Balanced Accuracy      0.7847   0.7562   0.7689   0.7468  0.66025
>
```

FINAL_MFCC_bez-kvantit

```
Confusion Matrix and Statistics

          Reference
Prediction    a    e    i    o    u
         a  987  121    2  113    6
         e  241 1547  352  208   48
         i    4  159  798    3   10
         o  137   96   44  920  188
         u    1    3    9   35  243

Overall Statistics

               Accuracy : 0.7163
                 95% CI : (0.705, 0.7275)
    No Information Rate : 0.3069
    P-Value [Acc > NIR] : < 2.2e-16

                  Kappa : 0.6275

 Mcnemar's Test P-Value : < 2.2e-16

Statistics by Class:

                     Class: a Class: e Class: i Class: o Class: u
Sensitivity            0.7204   0.8032   0.6622   0.7193  0.49091
Specificity            0.9507   0.8048   0.9653   0.9069  0.99170
Pos Pred Value         0.8031   0.6457   0.8193   0.6643  0.83505
Neg Pred Value         0.9241   0.9023   0.9232   0.9266  0.95789
Prevalence             0.2183   0.3069   0.1920   0.2038  0.07888
Detection Rate         0.1573   0.2465   0.1272   0.1466  0.03873
Detection Prevalence   0.1959   0.3818   0.1552   0.2207  0.04637
Balanced Accuracy      0.8356   0.8040   0.8138   0.8131  0.74130
>
```

FINAL_MFCC_vc-kvantit

```
Overall Statistics

               Accuracy : 0.6435
                 95% CI : (0.6315, 0.6554)
    No Information Rate : 0.3048
    P-Value [Acc > NIR] : < 2.2e-16

                  Kappa : 0.5479

 Mcnemar's Test P-Value : NA

Statistics by Class:

                     Class: a Class: a: Class: e Class: e: Class: i Class: i:
Sensitivity           0.56579   0.65246   0.8326  0.000000  0.19716   0.77154
Specificity           0.94624   0.98860   0.7842  1.000000  0.97557   0.96969
Pos Pred Value        0.68254   0.74532   0.6285       NaN  0.50545   0.68750
Neg Pred Value        0.91429   0.98235   0.9144  0.997927  0.90562   0.98004
Prevalence            0.16964   0.04863   0.3048  0.002073  0.11240   0.07956
Detection Rate        0.09598   0.03173   0.2538  0.000000  0.02216   0.06138
Detection Prevalence  0.14062   0.04257   0.4039  0.000000  0.04385   0.08929
Balanced Accuracy     0.75601   0.82053   0.8084  0.500000  0.58637   0.87061
                     Class: o Class: o: Class: u Class: u:
Sensitivity            0.7409  0.000000  0.41099  0.000000
Specificity            0.8917  1.000000  0.98401  1.000000
Pos Pred Value         0.6319       NaN  0.66786       NaN
Neg Pred Value         0.9320  0.996652  0.95527  0.993622
Prevalence             0.2006  0.003348  0.07254  0.006378
Detection Rate         0.1486  0.000000  0.02982  0.000000
Detection Prevalence   0.2352  0.000000  0.04464  0.000000
Balanced Accuracy      0.8163  0.500000  0.69750  0.500000
> 
```

SUMMARY_formanty_bez-kvantit_training

```
Call:
summary.resamples(object = results)

Models: RF1, RF2
Number of resamples: 6

Accuracy
         Min.   1st Qu.    Median    Mean   3rd Qu.      Max. NA's
RF1 0.6172357 0.6250752 0.6257424 0.62609 0.6295253 0.6321805    0
RF2 0.6172357 0.6250752 0.6257424 0.62609 0.6295253 0.6321805    0

Kappa
        Min.   1st Qu.    Median      Mean   3rd Qu.     Max. NA's
RF1 0.499745 0.5106541 0.5111501 0.5115645 0.5153277 0.520133    0
RF2 0.499745 0.5106541 0.5111501 0.5115645 0.5153277 0.520133    0
```

SUMMARY_MFCC_vc-kvantit_training

```
Call:
summary.resamples(object = results)

Models: RF1, RF2
Number of resamples: 6

Accuracy
         Min.  1st Qu.    Median      Mean   3rd Qu.      Max. NA's
RF1 0.6968153 0.700709 0.7042936 0.7042212 0.7072199 0.7122153    0
RF2 0.6968153 0.700709 0.7042936 0.7042212 0.7072199 0.7122153    0

Kappa
         Min.   1st Qu.    Median      Mean  3rd Qu.      Max. NA's
RF1 0.6017626 0.6068185 0.6116277 0.6116647 0.615971 0.6223359    0
RF2 0.6017626 0.6068185 0.6116277 0.6116647 0.615971 0.6223359    0

> 
```