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C:\Python27\python.exe C:/Users/Argvz/Documents/PycharmProjects/ClassifTweets/kfolds.py

----->>> 10-FOLDS <<<-----

----->>> NO NORMALISATION

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iteration: 1

C:\Python27\lib\site-packages\sklearn\metrics\classification.py:958:

UndefinedMetricWarning: Precision and F-score are ill-defined and being set to 0.0 in labels with no predicted samples.

'precision', 'predicted', average, warn_for)

iteration: 2

iteration: 3

iteration: 4

iteration: 5

iteration: 6

iteration: 7

iteration: 8

iteration: 9

iteration: 10

iteration: 11

iteration: 12

iteration: 13

iteration: 14

iteration: 15

iteration: 16

iteration: 17

iteration: 18

iteration: 19

iteration: 20

iteration: 21

iteration: 22

iteration: 23

iteration: 24

iteration: 25

iteration: 26

iteration: 27

iteration: 28

iteration: 29

iteration: 30

----->>> SEARCHING HYPERPARAMETERS

<<<-----

----->> binary - class type <<-----

Tuning hyper-parameters for precision

C:\Python27\lib\site-packages\sklearn\metrics\classification.py:958:

UndefinedMetricWarning: Precision is ill-defined and being set to 0.0 in labels with no predicted samples.

'precision', 'predicted', average, warn_for)

Best parameters set found on development set:

{'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

Grid scores on development set:

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

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0.548 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

0.548 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 3}

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 2}

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 2}

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 3}

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0.548 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 2}

0.548 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 2}

0.548 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 3}

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0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 2}

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0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 3}

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

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0.548 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 3}

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

0.548 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 3}

0.548 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}

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0.548 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}

0.548 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

0.548 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 3}

Detailed classifications report:

The model is trained on the full development set.

The scores are computed on the hull evaluation set.

	precision	recall	f1-score	support
0	0.71	1.00	0.83	374
1	0.00	0.00	0.00	150
avg / total	0.51	0.71	0.59	524

Tuning hyper-parameters for recall

Best parameters set found on development set:

{'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

Grid scores on development set:

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 3}

0.740 (+/-0.005) for {'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.740 (+/-0.005) for {'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}

0.740 (+/-0.005) for {'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

3}

0.740 (+/-0.005) for {'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 3}

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 2}

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 2}

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 3}

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 3}

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0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 3}

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0.740 (+/-0.005) for {'cache_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 2}

0.740 (+/-0.005) for {'cache_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 3}

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' : 3}

0.740 (+/-0.005) for {'cache_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}

0.740 (+/-0.005) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

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0.740 (+/-0.005) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

0.740 (+/-0.005) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 3}

Detailed classifications report:

The model is trained on the full development set.

The scores are computed on the hull evaluation set.

	precision	recall	f1-score	support
0	0.71	1.00	0.83	374
1	0.00	0.00	0.00	150
avg / total	0.51	0.71	0.59	524

----->> multi - class type <<-----
Tuning hyper-parameters for precision

Best parameters set found on development set:

{'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

Grid scores on development set:

0.353 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.353 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree ': 2}

0.353 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

0.353 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree ': 3}

0.353 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.353 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree ': 2}

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0.353 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree ': 3}

0.353 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree ': 2}

0.353 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree ': 2}

0.353 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree ': 3}

0.353 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree ': 3}

0.353 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree ': 2}

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0.353 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree

': 3}

0.353 (+/-0.008) for {'cache_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 2}

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0.353 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}

0.353 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}

0.353 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

0.353 (+/-0.008) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 3}

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`degree': 3}`

Detailed classifications report:

The model is trained on the full development set.
The scores are computed on the hull evaluation set.

	<code>precision</code>	<code>recall</code>	<code>f1-score</code>	<code>support</code>
1.0	0.00	0.00	0.00	80
2.0	0.56	1.00	0.72	294
3.0	0.00	0.00	0.00	150
avg / total	0.31	0.56	0.40	524

Tuning hyper-parameters for recall

Best parameters set found on development set:

`{'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}`

Grid scores on development set:

0.594 (+/-0.006) for `{'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}`

0.594 (+/-0.006) for `{'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}`

0.594 (+/-0.006) for `{'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}`

0.594 (+/-0.006) for `{'cache_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 3}`

0.594 (+/-0.006) for `{'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}`

0.594 (+/-0.006) for `{'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}`

0.594 (+/-0.006) for `{'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}`

0.594 (+/-0.006) for `{'cache_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 3}`

0.594 (+/-0.006) for `{'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 10}`

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0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 3}

0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.006) for {'cache_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 2}

0.594 (+/-0.006) for {'cache_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.006) for {'cache_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 3}

0.594 (+/-0.006) for {'cache_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 2}

0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.006) for {'cache_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 2}

0.594 (+/-0.006) for {'cache_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.006) for {'cache_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.006) for {'cache_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}

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degree': 2}

0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

0.594 (+/-0.006) for {'cache_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 3}

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0.594 (+/-0.006) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}

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0.594 (+/-0.006) for {'cache_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 3}

Detailed classifications report:

The model is trained on the full development set.

The scores are computed on the hull evaluation set.

	precision	recall	f1-score	support
1.0	0.00	0.00	0.00	80
2.0	0.56	1.00	0.72	294
3.0	0.00	0.00	0.00	150
avg / total	0.31	0.56	0.40	524

iteration: 1

iteration: 2

iteration: 3

iteration: 4

iteration: 5

iteration: 6

iteration: 7

iteration: 8

iteration: 9

iteration: 10

iteration: 11

iteration: 12

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```
iteration: 13
iteration: 14
iteration: 15
iteration: 16
iteration: 17
iteration: 18
iteration: 19
iteration: 20
iteration: 21
iteration: 22
iteration: 23
iteration: 24
iteration: 25
iteration: 26
iteration: 27
iteration: 28
iteration: 29
iteration: 30
```

----->>> EASY ENSEMBLE UNDERSAMPLING

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```
iteration: 30
iteration: 1
```

Determining classes statistics... 2 classes detected: {0: 1023, 1: 372}

Creation of the set #0

Under-sampling performed: Counter({0: 372, 1: 372})

Creation of the set #1

Under-sampling performed: Counter({0: 372, 1: 372})

Creation of the set #2

Under-sampling performed: Counter({0: 372, 1: 372})

Creation of the set #3

Under-sampling performed: Counter({0: 372, 1: 372})

Creation of the set #4

Under-sampling performed: Counter({0: 372, 1: 372})

Creation of the set #5

Under-sampling performed: Counter({0: 372, 1: 372})

Creation of the set #6

Under-sampling performed: Counter({0: 372, 1: 372})

Creation of the set #7

Under-sampling performed: Counter({0: 372, 1: 372})

Creation of the set #8

Under-sampling performed: Counter({0: 372, 1: 372})

Creation of the set #9

Under-sampling performed: Counter({0: 372, 1: 372})

```
iteration: 2
```

Determining classes statistics... 2 classes detected: {0: 1021, 1: 374}

Creation of the set #0

Under-sampling performed: Counter({0: 374, 1: 374})

Creation of the set #1
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #2
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #3
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #4
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #5
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #6
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #7
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #8
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #9
Under-sampling performed: Counter({0: 374, 1: 374})
 iteration: 3
Determining classes statistics... 2 classes detected: {0: 1031, 1: 364}
Creation of the set #0
Under-sampling performed: Counter({0: 364, 1: 364})
Creation of the set #1
Under-sampling performed: Counter({0: 364, 1: 364})
Creation of the set #2
Under-sampling performed: Counter({0: 364, 1: 364})
Creation of the set #3
Under-sampling performed: Counter({0: 364, 1: 364})
Creation of the set #4
Under-sampling performed: Counter({0: 364, 1: 364})
Creation of the set #5
Under-sampling performed: Counter({0: 364, 1: 364})
Creation of the set #6
Under-sampling performed: Counter({0: 364, 1: 364})
Creation of the set #7
Under-sampling performed: Counter({0: 364, 1: 364})
Creation of the set #8
Under-sampling performed: Counter({0: 364, 1: 364})
Creation of the set #9
Under-sampling performed: Counter({0: 364, 1: 364})
 iteration: 4
Determining classes statistics... 2 classes detected: {0: 1037, 1: 358}
Creation of the set #0
Under-sampling performed: Counter({0: 358, 1: 358})
Creation of the set #1
Under-sampling performed: Counter({0: 358, 1: 358})
Creation of the set #2
Under-sampling performed: Counter({0: 358, 1: 358})

Creation of the set #3
Under-sampling performed: Counter({0: 358, 1: 358})
Creation of the set #4
Under-sampling performed: Counter({0: 358, 1: 358})
Creation of the set #5
Under-sampling performed: Counter({0: 358, 1: 358})
Creation of the set #6
Under-sampling performed: Counter({0: 358, 1: 358})
Creation of the set #7
Under-sampling performed: Counter({0: 358, 1: 358})
Creation of the set #8
Under-sampling performed: Counter({0: 358, 1: 358})
Creation of the set #9
Under-sampling performed: Counter({0: 358, 1: 358})
 iteration: 5
Determining classes statistics... 2 classes detected: {0: 1026, 1: 369}
Creation of the set #0
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #1
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #2
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #3
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #4
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #5
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #6
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #7
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #8
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #9
Under-sampling performed: Counter({0: 369, 1: 369})
 iteration: 6
Determining classes statistics... 2 classes detected: {0: 1026, 1: 369}
Creation of the set #0
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #1
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #2
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #3
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #4
Under-sampling performed: Counter({0: 369, 1: 369})

Creation of the set #5
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #6
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #7
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #8
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #9
Under-sampling performed: Counter({0: 369, 1: 369})
 iteration: 7
Determining classes statistics... 2 classes detected: {0: 1028, 1: 367}
Creation of the set #0
Under-sampling performed: Counter({0: 367, 1: 367})
Creation of the set #1
Under-sampling performed: Counter({0: 367, 1: 367})
Creation of the set #2
Under-sampling performed: Counter({0: 367, 1: 367})
Creation of the set #3
Under-sampling performed: Counter({0: 367, 1: 367})
Creation of the set #4
Under-sampling performed: Counter({0: 367, 1: 367})
Creation of the set #5
Under-sampling performed: Counter({0: 367, 1: 367})
Creation of the set #6
Under-sampling performed: Counter({0: 367, 1: 367})
Creation of the set #7
Under-sampling performed: Counter({0: 367, 1: 367})
Creation of the set #8
Under-sampling performed: Counter({0: 367, 1: 367})
Creation of the set #9
Under-sampling performed: Counter({0: 367, 1: 367})
 iteration: 8
Determining classes statistics... 2 classes detected: {0: 1009, 1: 386}
Creation of the set #0
Under-sampling performed: Counter({0: 386, 1: 386})
Creation of the set #1
Under-sampling performed: Counter({0: 386, 1: 386})
Creation of the set #2
Under-sampling performed: Counter({0: 386, 1: 386})
Creation of the set #3
Under-sampling performed: Counter({0: 386, 1: 386})
Creation of the set #4
Under-sampling performed: Counter({0: 386, 1: 386})
Creation of the set #5
Under-sampling performed: Counter({0: 386, 1: 386})
Creation of the set #6
Under-sampling performed: Counter({0: 386, 1: 386})

Creation of the set #7
Under-sampling performed: Counter({0: 386, 1: 386})
Creation of the set #8
Under-sampling performed: Counter({0: 386, 1: 386})
Creation of the set #9
Under-sampling performed: Counter({0: 386, 1: 386})
iteration: 9
Determining classes statistics... 2 classes detected: {0: 1029, 1: 366}
Creation of the set #0
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #1
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #2
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #3
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #4
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #5
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #6
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #7
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #8
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #9
Under-sampling performed: Counter({0: 366, 1: 366})
iteration: 10
Determining classes statistics... 2 classes detected: {0: 1032, 1: 363}
Creation of the set #0
Under-sampling performed: Counter({0: 363, 1: 363})
Creation of the set #1
Under-sampling performed: Counter({0: 363, 1: 363})
Creation of the set #2
Under-sampling performed: Counter({0: 363, 1: 363})
Creation of the set #3
Under-sampling performed: Counter({0: 363, 1: 363})
Creation of the set #4
Under-sampling performed: Counter({0: 363, 1: 363})
Creation of the set #5
Under-sampling performed: Counter({0: 363, 1: 363})
Creation of the set #6
Under-sampling performed: Counter({0: 363, 1: 363})
Creation of the set #7
Under-sampling performed: Counter({0: 363, 1: 363})
Creation of the set #8
Under-sampling performed: Counter({0: 363, 1: 363})

Creation of the set #9

Under-sampling performed: Counter({0: 363, 1: 363})

iteration: 11

Determining classes statistics... 2 classes detected: {0: 1012, 1: 383}

Creation of the set #0

Under-sampling performed: Counter({0: 383, 1: 383})

Creation of the set #1

Under-sampling performed: Counter({0: 383, 1: 383})

Creation of the set #2

Under-sampling performed: Counter({0: 383, 1: 383})

Creation of the set #3

Under-sampling performed: Counter({0: 383, 1: 383})

Creation of the set #4

Under-sampling performed: Counter({0: 383, 1: 383})

Creation of the set #5

Under-sampling performed: Counter({0: 383, 1: 383})

Creation of the set #6

Under-sampling performed: Counter({0: 383, 1: 383})

Creation of the set #7

Under-sampling performed: Counter({0: 383, 1: 383})

Creation of the set #8

Under-sampling performed: Counter({0: 383, 1: 383})

Creation of the set #9

Under-sampling performed: Counter({0: 383, 1: 383})

iteration: 12

Determining classes statistics... 2 classes detected: {0: 1033, 1: 362}

Creation of the set #0

Under-sampling performed: Counter({0: 362, 1: 362})

Creation of the set #1

Under-sampling performed: Counter({0: 362, 1: 362})

Creation of the set #2

Under-sampling performed: Counter({0: 362, 1: 362})

Creation of the set #3

Under-sampling performed: Counter({0: 362, 1: 362})

Creation of the set #4

Under-sampling performed: Counter({0: 362, 1: 362})

Creation of the set #5

Under-sampling performed: Counter({0: 362, 1: 362})

Creation of the set #6

Under-sampling performed: Counter({0: 362, 1: 362})

Creation of the set #7

Under-sampling performed: Counter({0: 362, 1: 362})

Creation of the set #8

Under-sampling performed: Counter({0: 362, 1: 362})

Creation of the set #9

Under-sampling performed: Counter({0: 362, 1: 362})

iteration: 13

Determining classes statistics... 2 classes detected: {0: 1011, 1: 384}

Creation of the set #0
Under-sampling performed: Counter({0: 384, 1: 384})
Creation of the set #1
Under-sampling performed: Counter({0: 384, 1: 384})
Creation of the set #2
Under-sampling performed: Counter({0: 384, 1: 384})
Creation of the set #3
Under-sampling performed: Counter({0: 384, 1: 384})
Creation of the set #4
Under-sampling performed: Counter({0: 384, 1: 384})
Creation of the set #5
Under-sampling performed: Counter({0: 384, 1: 384})
Creation of the set #6
Under-sampling performed: Counter({0: 384, 1: 384})
Creation of the set #7
Under-sampling performed: Counter({0: 384, 1: 384})
Creation of the set #8
Under-sampling performed: Counter({0: 384, 1: 384})
Creation of the set #9
Under-sampling performed: Counter({0: 384, 1: 384})
 iteration: 14
Determining classes statistics... 2 classes detected: {0: 1026, 1: 369}
Creation of the set #0
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #1
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #2
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #3
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #4
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #5
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #6
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #7
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #8
Under-sampling performed: Counter({0: 369, 1: 369})
Creation of the set #9
Under-sampling performed: Counter({0: 369, 1: 369})
 iteration: 15
Determining classes statistics... 2 classes detected: {0: 1029, 1: 366}
Creation of the set #0
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #1
Under-sampling performed: Counter({0: 366, 1: 366})

Creation of the set #2
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #3
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #4
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #5
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #6
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #7
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #8
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #9
Under-sampling performed: Counter({0: 366, 1: 366})
iteration: 16
Determining classes statistics... 2 classes detected: {0: 1020, 1: 375}
Creation of the set #0
Under-sampling performed: Counter({0: 375, 1: 375})
Creation of the set #1
Under-sampling performed: Counter({0: 375, 1: 375})
Creation of the set #2
Under-sampling performed: Counter({0: 375, 1: 375})
Creation of the set #3
Under-sampling performed: Counter({0: 375, 1: 375})
Creation of the set #4
Under-sampling performed: Counter({0: 375, 1: 375})
Creation of the set #5
Under-sampling performed: Counter({0: 375, 1: 375})
Creation of the set #6
Under-sampling performed: Counter({0: 375, 1: 375})
Creation of the set #7
Under-sampling performed: Counter({0: 375, 1: 375})
Creation of the set #8
Under-sampling performed: Counter({0: 375, 1: 375})
Creation of the set #9
Under-sampling performed: Counter({0: 375, 1: 375})
iteration: 17
Determining classes statistics... 2 classes detected: {0: 1014, 1: 381}
Creation of the set #0
Under-sampling performed: Counter({0: 381, 1: 381})
Creation of the set #1
Under-sampling performed: Counter({0: 381, 1: 381})
Creation of the set #2
Under-sampling performed: Counter({0: 381, 1: 381})
Creation of the set #3
Under-sampling performed: Counter({0: 381, 1: 381})

Creation of the set #4
Under-sampling performed: Counter({0: 381, 1: 381})
Creation of the set #5
Under-sampling performed: Counter({0: 381, 1: 381})
Creation of the set #6
Under-sampling performed: Counter({0: 381, 1: 381})
Creation of the set #7
Under-sampling performed: Counter({0: 381, 1: 381})
Creation of the set #8
Under-sampling performed: Counter({0: 381, 1: 381})
Creation of the set #9
Under-sampling performed: Counter({0: 381, 1: 381})
 iteration: 18
Determining classes statistics... 2 classes detected: {0: 1021, 1: 374}
Creation of the set #0
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #1
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #2
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #3
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #4
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #5
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #6
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #7
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #8
Under-sampling performed: Counter({0: 374, 1: 374})
Creation of the set #9
Under-sampling performed: Counter({0: 374, 1: 374})
 iteration: 19
Determining classes statistics... 2 classes detected: {0: 1019, 1: 376}
Creation of the set #0
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #1
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #2
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #3
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #4
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #5
Under-sampling performed: Counter({0: 376, 1: 376})

Creation of the set #6
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #7
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #8
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #9
Under-sampling performed: Counter({0: 376, 1: 376})
iteration: 20
Determining classes statistics... 2 classes detected: {0: 1019, 1: 376}
Creation of the set #0
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #1
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #2
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #3
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #4
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #5
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #6
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #7
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #8
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #9
Under-sampling performed: Counter({0: 376, 1: 376})
iteration: 21
Determining classes statistics... 2 classes detected: {0: 1033, 1: 362}
Creation of the set #0
Under-sampling performed: Counter({0: 362, 1: 362})
Creation of the set #1
Under-sampling performed: Counter({0: 362, 1: 362})
Creation of the set #2
Under-sampling performed: Counter({0: 362, 1: 362})
Creation of the set #3
Under-sampling performed: Counter({0: 362, 1: 362})
Creation of the set #4
Under-sampling performed: Counter({0: 362, 1: 362})
Creation of the set #5
Under-sampling performed: Counter({0: 362, 1: 362})
Creation of the set #6
Under-sampling performed: Counter({0: 362, 1: 362})
Creation of the set #7
Under-sampling performed: Counter({0: 362, 1: 362})

Creation of the set #8
Under-sampling performed: Counter({0: 362, 1: 362})
Creation of the set #9
Under-sampling performed: Counter({0: 362, 1: 362})
iteration: 22
Determining classes statistics... 2 classes detected: {0: 1015, 1: 380}
Creation of the set #0
Under-sampling performed: Counter({0: 380, 1: 380})
Creation of the set #1
Under-sampling performed: Counter({0: 380, 1: 380})
Creation of the set #2
Under-sampling performed: Counter({0: 380, 1: 380})
Creation of the set #3
Under-sampling performed: Counter({0: 380, 1: 380})
Creation of the set #4
Under-sampling performed: Counter({0: 380, 1: 380})
Creation of the set #5
Under-sampling performed: Counter({0: 380, 1: 380})
Creation of the set #6
Under-sampling performed: Counter({0: 380, 1: 380})
Creation of the set #7
Under-sampling performed: Counter({0: 380, 1: 380})
Creation of the set #8
Under-sampling performed: Counter({0: 380, 1: 380})
Creation of the set #9
Under-sampling performed: Counter({0: 380, 1: 380})
iteration: 23
Determining classes statistics... 2 classes detected: {0: 1019, 1: 376}
Creation of the set #0
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #1
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #2
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #3
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #4
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #5
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #6
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #7
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #8
Under-sampling performed: Counter({0: 376, 1: 376})
Creation of the set #9
Under-sampling performed: Counter({0: 376, 1: 376})

iteration: 24

Determining classes statistics... 2 classes detected: {0: 1020, 1: 375}

Creation of the set #0

Under-sampling performed: Counter({0: 375, 1: 375})

Creation of the set #1

Under-sampling performed: Counter({0: 375, 1: 375})

Creation of the set #2

Under-sampling performed: Counter({0: 375, 1: 375})

Creation of the set #3

Under-sampling performed: Counter({0: 375, 1: 375})

Creation of the set #4

Under-sampling performed: Counter({0: 375, 1: 375})

Creation of the set #5

Under-sampling performed: Counter({0: 375, 1: 375})

Creation of the set #6

Under-sampling performed: Counter({0: 375, 1: 375})

Creation of the set #7

Under-sampling performed: Counter({0: 375, 1: 375})

Creation of the set #8

Under-sampling performed: Counter({0: 375, 1: 375})

Creation of the set #9

Under-sampling performed: Counter({0: 375, 1: 375})

iteration: 25

Determining classes statistics... 2 classes detected: {0: 1021, 1: 374}

Creation of the set #0

Under-sampling performed: Counter({0: 374, 1: 374})

Creation of the set #1

Under-sampling performed: Counter({0: 374, 1: 374})

Creation of the set #2

Under-sampling performed: Counter({0: 374, 1: 374})

Creation of the set #3

Under-sampling performed: Counter({0: 374, 1: 374})

Creation of the set #4

Under-sampling performed: Counter({0: 374, 1: 374})

Creation of the set #5

Under-sampling performed: Counter({0: 374, 1: 374})

Creation of the set #6

Under-sampling performed: Counter({0: 374, 1: 374})

Creation of the set #7

Under-sampling performed: Counter({0: 374, 1: 374})

Creation of the set #8

Under-sampling performed: Counter({0: 374, 1: 374})

Creation of the set #9

Under-sampling performed: Counter({0: 374, 1: 374})

iteration: 26

Determining classes statistics... 2 classes detected: {0: 1018, 1: 377}

Creation of the set #0

Under-sampling performed: Counter({0: 377, 1: 377})

Creation of the set #1
Under-sampling performed: Counter({0: 377, 1: 377})
Creation of the set #2
Under-sampling performed: Counter({0: 377, 1: 377})
Creation of the set #3
Under-sampling performed: Counter({0: 377, 1: 377})
Creation of the set #4
Under-sampling performed: Counter({0: 377, 1: 377})
Creation of the set #5
Under-sampling performed: Counter({0: 377, 1: 377})
Creation of the set #6
Under-sampling performed: Counter({0: 377, 1: 377})
Creation of the set #7
Under-sampling performed: Counter({0: 377, 1: 377})
Creation of the set #8
Under-sampling performed: Counter({0: 377, 1: 377})
Creation of the set #9
Under-sampling performed: Counter({0: 377, 1: 377})
 iteration: 27
Determining classes statistics... 2 classes detected: {0: 1030, 1: 365}
Creation of the set #0
Under-sampling performed: Counter({0: 365, 1: 365})
Creation of the set #1
Under-sampling performed: Counter({0: 365, 1: 365})
Creation of the set #2
Under-sampling performed: Counter({0: 365, 1: 365})
Creation of the set #3
Under-sampling performed: Counter({0: 365, 1: 365})
Creation of the set #4
Under-sampling performed: Counter({0: 365, 1: 365})
Creation of the set #5
Under-sampling performed: Counter({0: 365, 1: 365})
Creation of the set #6
Under-sampling performed: Counter({0: 365, 1: 365})
Creation of the set #7
Under-sampling performed: Counter({0: 365, 1: 365})
Creation of the set #8
Under-sampling performed: Counter({0: 365, 1: 365})
Creation of the set #9
Under-sampling performed: Counter({0: 365, 1: 365})
 iteration: 28
Determining classes statistics... 2 classes detected: {0: 1023, 1: 372}
Creation of the set #0
Under-sampling performed: Counter({0: 372, 1: 372})
Creation of the set #1
Under-sampling performed: Counter({0: 372, 1: 372})
Creation of the set #2
Under-sampling performed: Counter({0: 372, 1: 372})

Creation of the set #3
Under-sampling performed: Counter({0: 372, 1: 372})
Creation of the set #4
Under-sampling performed: Counter({0: 372, 1: 372})
Creation of the set #5
Under-sampling performed: Counter({0: 372, 1: 372})
Creation of the set #6
Under-sampling performed: Counter({0: 372, 1: 372})
Creation of the set #7
Under-sampling performed: Counter({0: 372, 1: 372})
Creation of the set #8
Under-sampling performed: Counter({0: 372, 1: 372})
Creation of the set #9
Under-sampling performed: Counter({0: 372, 1: 372})
 iteration: 29
Determining classes statistics... 2 classes detected: {0: 1029, 1: 366}
Creation of the set #0
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #1
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #2
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #3
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #4
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #5
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #6
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #7
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #8
Under-sampling performed: Counter({0: 366, 1: 366})
Creation of the set #9
Under-sampling performed: Counter({0: 366, 1: 366})
 iteration: 30
Determining classes statistics... 2 classes detected: {0: 1016, 1: 379}
Creation of the set #0
Under-sampling performed: Counter({0: 379, 1: 379})
Creation of the set #1
Under-sampling performed: Counter({0: 379, 1: 379})
Creation of the set #2
Under-sampling performed: Counter({0: 379, 1: 379})
Creation of the set #3
Under-sampling performed: Counter({0: 379, 1: 379})
Creation of the set #4
Under-sampling performed: Counter({0: 379, 1: 379})

Creation of the set #5
Under-sampling performed: Counter({0: 379, 1: 379})
Creation of the set #6
Under-sampling performed: Counter({0: 379, 1: 379})
Creation of the set #7
Under-sampling performed: Counter({0: 379, 1: 379})
Creation of the set #8
Under-sampling performed: Counter({0: 379, 1: 379})
Creation of the set #9
Under-sampling performed: Counter({0: 379, 1: 379})
 iteration: 1
Determining classes statistics... 3 classes detected: {1.0: 210, 2.0: 817, 3.0: 368}
Creation of the set #0
Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})
Creation of the set #1
Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})
Creation of the set #2
Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})
Creation of the set #3
Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})
Creation of the set #4
Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})
Creation of the set #5
Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})
Creation of the set #6
Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})
Creation of the set #7
Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})
Creation of the set #8
Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})
Creation of the set #9
Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})
 iteration: 2
Determining classes statistics... 3 classes detected: {1.0: 203, 2.0: 827, 3.0: 365}
Creation of the set #0
Under-sampling performed: Counter({1.0: 203, 2.0: 203, 3.0: 203})
Creation of the set #1
Under-sampling performed: Counter({1.0: 203, 2.0: 203, 3.0: 203})
Creation of the set #2
Under-sampling performed: Counter({1.0: 203, 2.0: 203, 3.0: 203})
Creation of the set #3
Under-sampling performed: Counter({1.0: 203, 2.0: 203, 3.0: 203})
Creation of the set #4
Under-sampling performed: Counter({1.0: 203, 2.0: 203, 3.0: 203})
Creation of the set #5
Under-sampling performed: Counter({1.0: 203, 2.0: 203, 3.0: 203})
Creation of the set #6
Under-sampling performed: Counter({1.0: 203, 2.0: 203, 3.0: 203})

Creation of the set #7
Under-sampling performed: Counter({1.0: 203, 2.0: 203, 3.0: 203})
Creation of the set #8
Under-sampling performed: Counter({1.0: 203, 2.0: 203, 3.0: 203})
Creation of the set #9
Under-sampling performed: Counter({1.0: 203, 2.0: 203, 3.0: 203})
iteration: 3
Determining classes statistics... 3 classes detected: {1.0: 201, 2.0: 819, 3.0: 375}
Creation of the set #0
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #1
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #2
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #3
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #4
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #5
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #6
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #7
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #8
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #9
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
iteration: 4
Determining classes statistics... 3 classes detected: {1.0: 211, 2.0: 813, 3.0: 371}
Creation of the set #0
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #1
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #2
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #3
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #4
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #5
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #6
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #7
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #8
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #9

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

iteration: 5

Determining classes statistics... 3 classes detected: {1.0: 191, 2.0: 824, 3.0: 380}

Creation of the set #0

Under-sampling performed: Counter({1.0: 191, 2.0: 191, 3.0: 191})

Creation of the set #1

Under-sampling performed: Counter({1.0: 191, 2.0: 191, 3.0: 191})

Creation of the set #2

Under-sampling performed: Counter({1.0: 191, 2.0: 191, 3.0: 191})

Creation of the set #3

Under-sampling performed: Counter({1.0: 191, 2.0: 191, 3.0: 191})

Creation of the set #4

Under-sampling performed: Counter({1.0: 191, 2.0: 191, 3.0: 191})

Creation of the set #5

Under-sampling performed: Counter({1.0: 191, 2.0: 191, 3.0: 191})

Creation of the set #6

Under-sampling performed: Counter({1.0: 191, 2.0: 191, 3.0: 191})

Creation of the set #7

Under-sampling performed: Counter({1.0: 191, 2.0: 191, 3.0: 191})

Creation of the set #8

Under-sampling performed: Counter({1.0: 191, 2.0: 191, 3.0: 191})

Creation of the set #9

Under-sampling performed: Counter({1.0: 191, 2.0: 191, 3.0: 191})

iteration: 6

Determining classes statistics... 3 classes detected: {1.0: 213, 2.0: 818, 3.0: 364}

Creation of the set #0

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #1

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #2

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #3

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #4

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #5

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #6

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #7

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #8

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #9

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

iteration: 7

Determining classes statistics... 3 classes detected: {1.0: 201, 2.0: 817, 3.0: 377}

Creation of the set #0
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #1
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #2
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #3
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #4
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #5
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #6
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #7
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #8
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #9
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
iteration: 8
Determining classes statistics... 3 classes detected: {1.0: 205, 2.0: 806, 3.0: 384}
Creation of the set #0
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #1
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #2
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #3
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #4
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #5
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #6
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #7
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #8
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #9
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
iteration: 9
Determining classes statistics... 3 classes detected: {1.0: 204, 2.0: 831, 3.0: 360}
Creation of the set #0
Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})
Creation of the set #1
Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #2

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #3

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #4

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #5

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #6

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #7

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #8

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #9

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

iteration: 10

Determining classes statistics... 3 classes detected: {1.0: 200, 2.0: 823, 3.0: 372}

Creation of the set #0

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #1

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #2

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #3

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #4

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #5

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #6

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #7

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #8

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #9

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

iteration: 11

Determining classes statistics... 3 classes detected: {1.0: 212, 2.0: 808, 3.0: 375}

Creation of the set #0

Under-sampling performed: Counter({1.0: 212, 2.0: 212, 3.0: 212})

Creation of the set #1

Under-sampling performed: Counter({1.0: 212, 2.0: 212, 3.0: 212})

Creation of the set #2

Under-sampling performed: Counter({1.0: 212, 2.0: 212, 3.0: 212})

Creation of the set #3

Under-sampling performed: Counter({1.0: 212, 2.0: 212, 3.0: 212})

Creation of the set #4

Under-sampling performed: Counter({1.0: 212, 2.0: 212, 3.0: 212})

Creation of the set #5

Under-sampling performed: Counter({1.0: 212, 2.0: 212, 3.0: 212})

Creation of the set #6

Under-sampling performed: Counter({1.0: 212, 2.0: 212, 3.0: 212})

Creation of the set #7

Under-sampling performed: Counter({1.0: 212, 2.0: 212, 3.0: 212})

Creation of the set #8

Under-sampling performed: Counter({1.0: 212, 2.0: 212, 3.0: 212})

Creation of the set #9

Under-sampling performed: Counter({1.0: 212, 2.0: 212, 3.0: 212})

iteration: 12

Determining classes statistics... 3 classes detected: {1.0: 207, 2.0: 818, 3.0: 370}

Creation of the set #0

Under-sampling performed: Counter({1.0: 207, 2.0: 207, 3.0: 207})

Creation of the set #1

Under-sampling performed: Counter({1.0: 207, 2.0: 207, 3.0: 207})

Creation of the set #2

Under-sampling performed: Counter({1.0: 207, 2.0: 207, 3.0: 207})

Creation of the set #3

Under-sampling performed: Counter({1.0: 207, 2.0: 207, 3.0: 207})

Creation of the set #4

Under-sampling performed: Counter({1.0: 207, 2.0: 207, 3.0: 207})

Creation of the set #5

Under-sampling performed: Counter({1.0: 207, 2.0: 207, 3.0: 207})

Creation of the set #6

Under-sampling performed: Counter({1.0: 207, 2.0: 207, 3.0: 207})

Creation of the set #7

Under-sampling performed: Counter({1.0: 207, 2.0: 207, 3.0: 207})

Creation of the set #8

Under-sampling performed: Counter({1.0: 207, 2.0: 207, 3.0: 207})

Creation of the set #9

Under-sampling performed: Counter({1.0: 207, 2.0: 207, 3.0: 207})

iteration: 13

Determining classes statistics... 3 classes detected: {1.0: 205, 2.0: 807, 3.0: 383}

Creation of the set #0

Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})

Creation of the set #1

Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})

Creation of the set #2

Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})

Creation of the set #3

Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})

Creation of the set #4

Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})

Creation of the set #5

Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})

Creation of the set #6

Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})

Creation of the set #7

Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})

Creation of the set #8

Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})

Creation of the set #9

Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})

iteration: 14

Determining classes statistics... 3 classes detected: {1.0: 211, 2.0: 816, 3.0: 368}

Creation of the set #0

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #1

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #2

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #3

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #4

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #5

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #6

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #7

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #8

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #9

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

iteration: 15

Determining classes statistics... 3 classes detected: {1.0: 204, 2.0: 818, 3.0: 373}

Creation of the set #0

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #1

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #2

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #3

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #4

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #5

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #6

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #7

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #8

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

Creation of the set #9

Under-sampling performed: Counter({1.0: 204, 2.0: 204, 3.0: 204})

iteration: 16

Determining classes statistics... 3 classes detected: {1.0: 210, 2.0: 807, 3.0: 378}

Creation of the set #0

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #1

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #2

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #3

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #4

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #5

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #6

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #7

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #8

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #9

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

iteration: 17

Determining classes statistics... 3 classes detected: {1.0: 210, 2.0: 804, 3.0: 381}

Creation of the set #0

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #1

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #2

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #3

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #4

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #5

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #6

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #7

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #8

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #9

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

iteration: 18

Determining classes statistics... 3 classes detected: {1.0: 213, 2.0: 807, 3.0: 375}

Creation of the set #0

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #1

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #2

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #3

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #4

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #5

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #6

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #7

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #8

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

Creation of the set #9

Under-sampling performed: Counter({1.0: 213, 2.0: 213, 3.0: 213})

iteration: 19

Determining classes statistics... 3 classes detected: {1.0: 215, 2.0: 801, 3.0: 379}

Creation of the set #0

Under-sampling performed: Counter({1.0: 215, 2.0: 215, 3.0: 215})

Creation of the set #1

Under-sampling performed: Counter({1.0: 215, 2.0: 215, 3.0: 215})

Creation of the set #2

Under-sampling performed: Counter({1.0: 215, 2.0: 215, 3.0: 215})

Creation of the set #3

Under-sampling performed: Counter({1.0: 215, 2.0: 215, 3.0: 215})

Creation of the set #4

Under-sampling performed: Counter({1.0: 215, 2.0: 215, 3.0: 215})

Creation of the set #5

Under-sampling performed: Counter({1.0: 215, 2.0: 215, 3.0: 215})

Creation of the set #6

Under-sampling performed: Counter({1.0: 215, 2.0: 215, 3.0: 215})

Creation of the set #7

Under-sampling performed: Counter({1.0: 215, 2.0: 215, 3.0: 215})

Creation of the set #8

Under-sampling performed: Counter({1.0: 215, 2.0: 215, 3.0: 215})

Creation of the set #9

Under-sampling performed: Counter({1.0: 215, 2.0: 215, 3.0: 215})

iteration: 20

Determining classes statistics... 3 classes detected: {1.0: 201, 2.0: 817, 3.0: 377}

Creation of the set #0

Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})

Creation of the set #1
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #2
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #3
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #4
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #5
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #6
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #7
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #8
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
Creation of the set #9
Under-sampling performed: Counter({1.0: 201, 2.0: 201, 3.0: 201})
 iteration: 21
Determining classes statistics... 3 classes detected: {1.0: 214, 2.0: 811, 3.0: 370}
Creation of the set #0
Under-sampling performed: Counter({1.0: 214, 2.0: 214, 3.0: 214})
Creation of the set #1
Under-sampling performed: Counter({1.0: 214, 2.0: 214, 3.0: 214})
Creation of the set #2
Under-sampling performed: Counter({1.0: 214, 2.0: 214, 3.0: 214})
Creation of the set #3
Under-sampling performed: Counter({1.0: 214, 2.0: 214, 3.0: 214})
Creation of the set #4
Under-sampling performed: Counter({1.0: 214, 2.0: 214, 3.0: 214})
Creation of the set #5
Under-sampling performed: Counter({1.0: 214, 2.0: 214, 3.0: 214})
Creation of the set #6
Under-sampling performed: Counter({1.0: 214, 2.0: 214, 3.0: 214})
Creation of the set #7
Under-sampling performed: Counter({1.0: 214, 2.0: 214, 3.0: 214})
Creation of the set #8
Under-sampling performed: Counter({1.0: 214, 2.0: 214, 3.0: 214})
Creation of the set #9
Under-sampling performed: Counter({1.0: 214, 2.0: 214, 3.0: 214})
 iteration: 22
Determining classes statistics... 3 classes detected: {1.0: 209, 2.0: 823, 3.0: 363}
Creation of the set #0
Under-sampling performed: Counter({1.0: 209, 2.0: 209, 3.0: 209})
Creation of the set #1
Under-sampling performed: Counter({1.0: 209, 2.0: 209, 3.0: 209})
Creation of the set #2
Under-sampling performed: Counter({1.0: 209, 2.0: 209, 3.0: 209})

Creation of the set #3

Under-sampling performed: Counter({1.0: 209, 2.0: 209, 3.0: 209})

Creation of the set #4

Under-sampling performed: Counter({1.0: 209, 2.0: 209, 3.0: 209})

Creation of the set #5

Under-sampling performed: Counter({1.0: 209, 2.0: 209, 3.0: 209})

Creation of the set #6

Under-sampling performed: Counter({1.0: 209, 2.0: 209, 3.0: 209})

Creation of the set #7

Under-sampling performed: Counter({1.0: 209, 2.0: 209, 3.0: 209})

Creation of the set #8

Under-sampling performed: Counter({1.0: 209, 2.0: 209, 3.0: 209})

Creation of the set #9

Under-sampling performed: Counter({1.0: 209, 2.0: 209, 3.0: 209})

iteration: 23

Determining classes statistics... 3 classes detected: {1.0: 210, 2.0: 817, 3.0: 368}

Creation of the set #0

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #1

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #2

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #3

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #4

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #5

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #6

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #7

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #8

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #9

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

iteration: 24

Determining classes statistics... 3 classes detected: {1.0: 210, 2.0: 801, 3.0: 384}

Creation of the set #0

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #1

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #2

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #3

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #4

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #5

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #6

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #7

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #8

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

Creation of the set #9

Under-sampling performed: Counter({1.0: 210, 2.0: 210, 3.0: 210})

iteration: 25

Determining classes statistics... 3 classes detected: {1.0: 200, 2.0: 818, 3.0: 377}

Creation of the set #0

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #1

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #2

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #3

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #4

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #5

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #6

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #7

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #8

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

Creation of the set #9

Under-sampling performed: Counter({1.0: 200, 2.0: 200, 3.0: 200})

iteration: 26

Determining classes statistics... 3 classes detected: {1.0: 211, 2.0: 818, 3.0: 366}

Creation of the set #0

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #1

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #2

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #3

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #4

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #5

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #6

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #7

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #8

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

Creation of the set #9

Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

iteration: 27

Determining classes statistics... 3 classes detected: {1.0: 206, 2.0: 829, 3.0: 360}

Creation of the set #0

Under-sampling performed: Counter({1.0: 206, 2.0: 206, 3.0: 206})

Creation of the set #1

Under-sampling performed: Counter({1.0: 206, 2.0: 206, 3.0: 206})

Creation of the set #2

Under-sampling performed: Counter({1.0: 206, 2.0: 206, 3.0: 206})

Creation of the set #3

Under-sampling performed: Counter({1.0: 206, 2.0: 206, 3.0: 206})

Creation of the set #4

Under-sampling performed: Counter({1.0: 206, 2.0: 206, 3.0: 206})

Creation of the set #5

Under-sampling performed: Counter({1.0: 206, 2.0: 206, 3.0: 206})

Creation of the set #6

Under-sampling performed: Counter({1.0: 206, 2.0: 206, 3.0: 206})

Creation of the set #7

Under-sampling performed: Counter({1.0: 206, 2.0: 206, 3.0: 206})

Creation of the set #8

Under-sampling performed: Counter({1.0: 206, 2.0: 206, 3.0: 206})

Creation of the set #9

Under-sampling performed: Counter({1.0: 206, 2.0: 206, 3.0: 206})

iteration: 28

Determining classes statistics... 3 classes detected: {1.0: 202, 2.0: 820, 3.0: 373}

Creation of the set #0

Under-sampling performed: Counter({1.0: 202, 2.0: 202, 3.0: 202})

Creation of the set #1

Under-sampling performed: Counter({1.0: 202, 2.0: 202, 3.0: 202})

Creation of the set #2

Under-sampling performed: Counter({1.0: 202, 2.0: 202, 3.0: 202})

Creation of the set #3

Under-sampling performed: Counter({1.0: 202, 2.0: 202, 3.0: 202})

Creation of the set #4

Under-sampling performed: Counter({1.0: 202, 2.0: 202, 3.0: 202})

Creation of the set #5

Under-sampling performed: Counter({1.0: 202, 2.0: 202, 3.0: 202})

Creation of the set #6

Under-sampling performed: Counter({1.0: 202, 2.0: 202, 3.0: 202})

Creation of the set #7

Under-sampling performed: Counter({1.0: 202, 2.0: 202, 3.0: 202})

Creation of the set #8

Under-sampling performed: Counter({1.0: 202, 2.0: 202, 3.0: 202})

Creation of the set #9
Under-sampling performed: Counter({1.0: 202, 2.0: 202, 3.0: 202})
iteration: 29
Determining classes statistics... 3 classes detected: {1.0: 205, 2.0: 816, 3.0: 374}
Creation of the set #0
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #1
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #2
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #3
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #4
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #5
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #6
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #7
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #8
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
Creation of the set #9
Under-sampling performed: Counter({1.0: 205, 2.0: 205, 3.0: 205})
iteration: 30
Determining classes statistics... 3 classes detected: {1.0: 211, 2.0: 814, 3.0: 370}
Creation of the set #0
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #1
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #2
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #3
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #4
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #5
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #6
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #7
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #8
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})
Creation of the set #9
Under-sampling performed: Counter({1.0: 211, 2.0: 211, 3.0: 211})

----->>> RANDOM OVERSAMPLING

<<<-----
iteration: 1
Determining classes statistics... 2 classes detected: {0: 1030, 1: 365}
Over-sampling performed: Counter({0: 1030, 1: 730})
iteration: 2
Determining classes statistics... 2 classes detected: {0: 1018, 1: 377}
Over-sampling performed: Counter({0: 1018, 1: 754})
iteration: 3
Determining classes statistics... 2 classes detected: {0: 1014, 1: 381}
Over-sampling performed: Counter({0: 1014, 1: 762})
iteration: 4
Determining classes statistics... 2 classes detected: {0: 1025, 1: 370}
Over-sampling performed: Counter({0: 1025, 1: 740})
iteration: 5
Determining classes statistics... 2 classes detected: {0: 1023, 1: 372}
Over-sampling performed: Counter({0: 1023, 1: 744})
iteration: 6
Determining classes statistics... 2 classes detected: {0: 1024, 1: 371}
Over-sampling performed: Counter({0: 1024, 1: 742})
iteration: 7
Determining classes statistics... 2 classes detected: {0: 1031, 1: 364}
Over-sampling performed: Counter({0: 1031, 1: 728})
iteration: 8
Determining classes statistics... 2 classes detected: {0: 1015, 1: 380}
Over-sampling performed: Counter({0: 1015, 1: 760})
iteration: 9
Determining classes statistics... 2 classes detected: {0: 1025, 1: 370}
Over-sampling performed: Counter({0: 1025, 1: 740})
iteration: 10
Determining classes statistics... 2 classes detected: {0: 1039, 1: 356}
Over-sampling performed: Counter({0: 1039, 1: 712})
iteration: 11
Determining classes statistics... 2 classes detected: {0: 1044, 1: 351}
Over-sampling performed: Counter({0: 1044, 1: 702})
iteration: 12
Determining classes statistics... 2 classes detected: {0: 1018, 1: 377}
Over-sampling performed: Counter({0: 1018, 1: 754})
iteration: 13
Determining classes statistics... 2 classes detected: {0: 1015, 1: 380}
Over-sampling performed: Counter({0: 1015, 1: 760})
iteration: 14
Determining classes statistics... 2 classes detected: {0: 1034, 1: 361}
Over-sampling performed: Counter({0: 1034, 1: 722})
iteration: 15
Determining classes statistics... 2 classes detected: {0: 1022, 1: 373}
Over-sampling performed: Counter({0: 1022, 1: 746})
iteration: 16
Determining classes statistics... 2 classes detected: {0: 1009, 1: 386}

```
Over-sampling performed: Counter({0: 1009, 1: 772})
iteration: 17
Determining classes statistics... 2 classes detected: {0: 1015, 1: 380}
Over-sampling performed: Counter({0: 1015, 1: 760})
iteration: 18
Determining classes statistics... 2 classes detected: {0: 1023, 1: 372}
Over-sampling performed: Counter({0: 1023, 1: 744})
iteration: 19
Determining classes statistics... 2 classes detected: {0: 1015, 1: 380}
Over-sampling performed: Counter({0: 1015, 1: 760})
iteration: 20
Determining classes statistics... 2 classes detected: {0: 1032, 1: 363}
Over-sampling performed: Counter({0: 1032, 1: 726})
iteration: 21
Determining classes statistics... 2 classes detected: {0: 1020, 1: 375}
Over-sampling performed: Counter({0: 1020, 1: 750})
iteration: 22
Determining classes statistics... 2 classes detected: {0: 1025, 1: 370}
Over-sampling performed: Counter({0: 1025, 1: 740})
iteration: 23
Determining classes statistics... 2 classes detected: {0: 1028, 1: 367}
Over-sampling performed: Counter({0: 1028, 1: 734})
iteration: 24
Determining classes statistics... 2 classes detected: {0: 1011, 1: 384}
Over-sampling performed: Counter({0: 1011, 1: 768})
iteration: 25
Determining classes statistics... 2 classes detected: {0: 1026, 1: 369}
Over-sampling performed: Counter({0: 1026, 1: 738})
iteration: 26
Determining classes statistics... 2 classes detected: {0: 1021, 1: 374}
Over-sampling performed: Counter({0: 1021, 1: 748})
iteration: 27
Determining classes statistics... 2 classes detected: {0: 1031, 1: 364}
Over-sampling performed: Counter({0: 1031, 1: 728})
iteration: 28
Determining classes statistics... 2 classes detected: {0: 1026, 1: 369}
Over-sampling performed: Counter({0: 1026, 1: 738})
iteration: 29
Determining classes statistics... 2 classes detected: {0: 1026, 1: 369}
Over-sampling performed: Counter({0: 1026, 1: 738})
iteration: 30
Determining classes statistics... 2 classes detected: {0: 1017, 1: 378}
Over-sampling performed: Counter({0: 1017, 1: 756})
iteration: 1
Determining classes statistics... 3 classes detected: {1.0: 189, 2.0: 822, 3.0: 384}
Over-sampling performed: Counter({2.0: 822, 3.0: 768, 1.0: 378})
iteration: 2
Determining classes statistics... 3 classes detected: {1.0: 206, 2.0: 813, 3.0: 376}
```

Over-sampling performed: Counter({2.0: 813, 3.0: 752, 1.0: 412})
iteration: 3
Determining classes statistics... 3 classes detected: {1.0: 223, 2.0: 805, 3.0: 367}
Over-sampling performed: Counter({2.0: 805, 3.0: 734, 1.0: 446})
iteration: 4
Determining classes statistics... 3 classes detected: {1.0: 205, 2.0: 828, 3.0: 362}
Over-sampling performed: Counter({2.0: 828, 3.0: 724, 1.0: 410})
iteration: 5
Determining classes statistics... 3 classes detected: {1.0: 199, 2.0: 813, 3.0: 383}
Over-sampling performed: Counter({2.0: 813, 3.0: 766, 1.0: 398})
iteration: 6
Determining classes statistics... 3 classes detected: {1.0: 198, 2.0: 825, 3.0: 372}
Over-sampling performed: Counter({2.0: 825, 3.0: 744, 1.0: 396})
iteration: 7
Determining classes statistics... 3 classes detected: {1.0: 202, 2.0: 802, 3.0: 391}
Over-sampling performed: Counter({2.0: 802, 3.0: 782, 1.0: 404})
iteration: 8
Determining classes statistics... 3 classes detected: {1.0: 217, 2.0: 806, 3.0: 372}
Over-sampling performed: Counter({2.0: 806, 3.0: 744, 1.0: 434})
iteration: 9
Determining classes statistics... 3 classes detected: {1.0: 208, 2.0: 818, 3.0: 369}
Over-sampling performed: Counter({2.0: 818, 3.0: 738, 1.0: 416})
iteration: 10
Determining classes statistics... 3 classes detected: {1.0: 195, 2.0: 828, 3.0: 372}
Over-sampling performed: Counter({2.0: 828, 3.0: 744, 1.0: 390})
iteration: 11
Determining classes statistics... 3 classes detected: {1.0: 207, 2.0: 819, 3.0: 369}
Over-sampling performed: Counter({2.0: 819, 3.0: 738, 1.0: 414})
iteration: 12
Determining classes statistics... 3 classes detected: {1.0: 212, 2.0: 803, 3.0: 380}
Over-sampling performed: Counter({2.0: 803, 3.0: 760, 1.0: 424})
iteration: 13
Determining classes statistics... 3 classes detected: {1.0: 209, 2.0: 829, 3.0: 357}
Over-sampling performed: Counter({2.0: 829, 3.0: 714, 1.0: 418})
iteration: 14
Determining classes statistics... 3 classes detected: {1.0: 206, 2.0: 812, 3.0: 377}
Over-sampling performed: Counter({2.0: 812, 3.0: 754, 1.0: 412})
iteration: 15
Determining classes statistics... 3 classes detected: {1.0: 194, 2.0: 813, 3.0: 388}
Over-sampling performed: Counter({2.0: 813, 3.0: 776, 1.0: 388})
iteration: 16
Determining classes statistics... 3 classes detected: {1.0: 207, 2.0: 814, 3.0: 374}
Over-sampling performed: Counter({2.0: 814, 3.0: 748, 1.0: 414})
iteration: 17
Determining classes statistics... 3 classes detected: {1.0: 212, 2.0: 808, 3.0: 375}
Over-sampling performed: Counter({2.0: 808, 3.0: 750, 1.0: 424})
iteration: 18
Determining classes statistics... 3 classes detected: {1.0: 202, 2.0: 805, 3.0: 388}

```
Over-sampling performed: Counter({2.0: 805, 3.0: 776, 1.0: 404})
iteration: 19
Determining classes statistics... 3 classes detected: {1.0: 204, 2.0: 818, 3.0: 373}
Over-sampling performed: Counter({2.0: 818, 3.0: 746, 1.0: 408})
iteration: 20
Determining classes statistics... 3 classes detected: {1.0: 206, 2.0: 811, 3.0: 378}
Over-sampling performed: Counter({2.0: 811, 3.0: 756, 1.0: 412})
iteration: 21
Determining classes statistics... 3 classes detected: {1.0: 207, 2.0: 808, 3.0: 380}
Over-sampling performed: Counter({2.0: 808, 3.0: 760, 1.0: 414})
iteration: 22
Determining classes statistics... 3 classes detected: {1.0: 204, 2.0: 820, 3.0: 371}
Over-sampling performed: Counter({2.0: 820, 3.0: 742, 1.0: 408})
iteration: 23
Determining classes statistics... 3 classes detected: {1.0: 215, 2.0: 816, 3.0: 364}
Over-sampling performed: Counter({2.0: 816, 3.0: 728, 1.0: 430})
iteration: 24
Determining classes statistics... 3 classes detected: {1.0: 203, 2.0: 815, 3.0: 377}
Over-sampling performed: Counter({2.0: 815, 3.0: 754, 1.0: 406})
iteration: 25
Determining classes statistics... 3 classes detected: {1.0: 202, 2.0: 812, 3.0: 381}
Over-sampling performed: Counter({2.0: 812, 3.0: 762, 1.0: 404})
iteration: 26
Determining classes statistics... 3 classes detected: {1.0: 208, 2.0: 813, 3.0: 374}
Over-sampling performed: Counter({2.0: 813, 3.0: 748, 1.0: 416})
iteration: 27
Determining classes statistics... 3 classes detected: {1.0: 214, 2.0: 810, 3.0: 371}
Over-sampling performed: Counter({2.0: 810, 3.0: 742, 1.0: 428})
iteration: 28
Determining classes statistics... 3 classes detected: {1.0: 208, 2.0: 818, 3.0: 369}
Over-sampling performed: Counter({2.0: 818, 3.0: 738, 1.0: 416})
iteration: 29
Determining classes statistics... 3 classes detected: {1.0: 204, 2.0: 827, 3.0: 364}
Over-sampling performed: Counter({2.0: 827, 3.0: 728, 1.0: 408})
iteration: 30
Determining classes statistics... 3 classes detected: {1.0: 200, 2.0: 823, 3.0: 372}
Over-sampling performed: Counter({2.0: 823, 3.0: 744, 1.0: 400})
```

Process finished with exit code 0