

File - unknown

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:

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 3}

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0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 3}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}

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0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}

0.550 (+/-0.006) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

0.550 (+/-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
0	0.72	1.00	0.83	375
1	0.00	0.00	0.00	149
avg / total	0.51	0.72	0.60	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:

0.742 (+/-0.004) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.742 (+/-0.004) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}

0.742 (+/-0.004) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

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0.742 (+/-0.004) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}

0.742 (+/-0.004) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

3}

0.742 (+/-0.004) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 3}

0.742 (+/-0.004) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 2}

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0.742 (+/-0.004) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 2}

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0.742 (+/-0.004) for {'cache\_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 3}

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' : 3}

0.742 (+/-0.004) for {'cache\_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.742 (+/-0.004) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}

0.742 (+/-0.004) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}

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0.742 (+/-0.004) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

0.742 (+/-0.004) 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	0.72	1.00	0.83	375
1	0.00	0.00	0.00	149
avg / total	0.51	0.72	0.60	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 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree ': 2}

0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree ': 3}

0.353 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.353 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree ': 2}

0.353 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

0.353 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree ': 3}

0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree ': 2}

0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree ': 2}

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0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree ': 3}

0.353 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree ': 2}

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0.353 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree ': 3}

0.353 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree

' : 3}

0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 2}

0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 2}

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0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

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0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

0.353 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 3}

0.353 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}

0.353 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}

0.353 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}

0.353 (+/-0.002) 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.

	precision	recall	f1-score	support
1.0	0.00	0.00	0.00	83
2.0	0.56	1.00	0.72	292
3.0	0.00	0.00	0.00	149
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 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.001, 'degree': 3}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 10}

' : 2}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 3}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 10, 'gamma': 0.001, 'degree': 3}

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0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 2}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 100, 'gamma': 0.0001, 'degree': 3}

0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}

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**degree': 2}**

**0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}**

**0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}**

**0.594 (+/-0.002) for {'cache\_size': 300, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 3}**

**0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 2}**

**0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.0001, 'degree': 2}**

**0.594 (+/-0.002) for {'cache\_size': 500, 'kernel': 'poly', 'C': 1000, 'gamma': 0.001, 'degree': 3}**

**0.594 (+/-0.002) 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.**

	<b>precision</b>	<b>recall</b>	<b>f1-score</b>	<b>support</b>
1.0	0.00	0.00	0.00	83
2.0	0.56	1.00	0.72	292
3.0	0.00	0.00	0.00	149
<b>avg / total</b>	<b>0.31</b>	<b>0.56</b>	<b>0.40</b>	<b>524</b>

**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: 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: 2
```

Determining classes statistics... 2 classes detected: {0: 1017, 1: 378}

Creation of the set #0

Under-sampling performed: Counter({0: 378, 1: 378})

**Creation of the set #1**  
**Under-sampling performed: Counter({0: 378, 1: 378})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({0: 378, 1: 378})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({0: 378, 1: 378})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({0: 378, 1: 378})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({0: 378, 1: 378})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({0: 378, 1: 378})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({0: 378, 1: 378})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({0: 378, 1: 378})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({0: 378, 1: 378})**  
    iteration: 3  
**Determining classes statistics... 2 classes detected: {0: 1025, 1: 370}**  
**Creation of the set #0**  
**Under-sampling performed: Counter({0: 370, 1: 370})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({0: 370, 1: 370})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({0: 370, 1: 370})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({0: 370, 1: 370})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({0: 370, 1: 370})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({0: 370, 1: 370})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({0: 370, 1: 370})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({0: 370, 1: 370})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({0: 370, 1: 370})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({0: 370, 1: 370})**  
    iteration: 4  
**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: 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: 1024, 1: 371}**  
**Creation of the set #0**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({0: 371, 1: 371})**

**Creation of the set #5**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
    iteration: 7  
**Determining classes statistics... 2 classes detected: {0: 1027, 1: 368}**  
**Creation of the set #0**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
    iteration: 8  
**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: 9  
**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: 10  
**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: 11**

**Determining classes statistics... 2 classes detected: {0: 1024, 1: 371}**

**Creation of the set #0**

**Under-sampling performed: Counter({0: 371, 1: 371})**

**Creation of the set #1**

**Under-sampling performed: Counter({0: 371, 1: 371})**

**Creation of the set #2**

**Under-sampling performed: Counter({0: 371, 1: 371})**

**Creation of the set #3**

**Under-sampling performed: Counter({0: 371, 1: 371})**

**Creation of the set #4**

**Under-sampling performed: Counter({0: 371, 1: 371})**

**Creation of the set #5**

**Under-sampling performed: Counter({0: 371, 1: 371})**

**Creation of the set #6**

**Under-sampling performed: Counter({0: 371, 1: 371})**

**Creation of the set #7**

**Under-sampling performed: Counter({0: 371, 1: 371})**

**Creation of the set #8**

**Under-sampling performed: Counter({0: 371, 1: 371})**

**Creation of the set #9**

**Under-sampling performed: Counter({0: 371, 1: 371})**

**iteration: 12**

**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: 13**

**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: 14  
**Determining classes statistics... 2 classes detected: {0: 1024, 1: 371}**  
**Creation of the set #0**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({0: 371, 1: 371})**  
    iteration: 15  
**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: 16  
Determining classes statistics... 2 classes detected: {0: 1036, 1: 359}  
**Creation of the set #0**  
**Under-sampling performed: Counter({0: 359, 1: 359})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({0: 359, 1: 359})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({0: 359, 1: 359})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({0: 359, 1: 359})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({0: 359, 1: 359})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({0: 359, 1: 359})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({0: 359, 1: 359})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({0: 359, 1: 359})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({0: 359, 1: 359})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({0: 359, 1: 359})**  
iteration: 17  
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: 18  
**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: 19  
**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: 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: 1041, 1: 354}  
**Creation of the set #0**  
**Under-sampling performed: Counter({0: 354, 1: 354})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({0: 354, 1: 354})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({0: 354, 1: 354})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({0: 354, 1: 354})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({0: 354, 1: 354})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({0: 354, 1: 354})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({0: 354, 1: 354})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({0: 354, 1: 354})**

**Creation of the set #8**  
**Under-sampling performed: Counter({0: 354, 1: 354})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({0: 354, 1: 354})**  
iteration: 22  
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: 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: 1027, 1: 368}

Creation of the set #0

Under-sampling performed: Counter({0: 368, 1: 368})

Creation of the set #1

Under-sampling performed: Counter({0: 368, 1: 368})

Creation of the set #2

Under-sampling performed: Counter({0: 368, 1: 368})

Creation of the set #3

Under-sampling performed: Counter({0: 368, 1: 368})

Creation of the set #4

Under-sampling performed: Counter({0: 368, 1: 368})

Creation of the set #5

Under-sampling performed: Counter({0: 368, 1: 368})

Creation of the set #6

Under-sampling performed: Counter({0: 368, 1: 368})

Creation of the set #7

Under-sampling performed: Counter({0: 368, 1: 368})

Creation of the set #8

Under-sampling performed: Counter({0: 368, 1: 368})

Creation of the set #9

Under-sampling performed: Counter({0: 368, 1: 368})

iteration: 25

Determining classes statistics... 2 classes detected: {0: 1017, 1: 378}

Creation of the set #0

Under-sampling performed: Counter({0: 378, 1: 378})

Creation of the set #1

Under-sampling performed: Counter({0: 378, 1: 378})

Creation of the set #2

Under-sampling performed: Counter({0: 378, 1: 378})

Creation of the set #3

Under-sampling performed: Counter({0: 378, 1: 378})

Creation of the set #4

Under-sampling performed: Counter({0: 378, 1: 378})

Creation of the set #5

Under-sampling performed: Counter({0: 378, 1: 378})

Creation of the set #6

Under-sampling performed: Counter({0: 378, 1: 378})

Creation of the set #7

Under-sampling performed: Counter({0: 378, 1: 378})

Creation of the set #8

Under-sampling performed: Counter({0: 378, 1: 378})

Creation of the set #9

Under-sampling performed: Counter({0: 378, 1: 378})

iteration: 26

Determining classes statistics... 2 classes detected: {0: 1027, 1: 368}

Creation of the set #0

Under-sampling performed: Counter({0: 368, 1: 368})

**Creation of the set #1**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({0: 368, 1: 368})**  
    iteration: 27  
**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: 28  
**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: 29  
**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: 30  
**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: 1**  
**Determining classes statistics... 3 classes detected: {1.0: 208, 2.0: 819, 3.0: 368}**  
**Creation of the set #0**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
    **iteration: 2**  
**Determining classes statistics... 3 classes detected: {1.0: 224, 2.0: 813, 3.0: 358}**  
**Creation of the set #0**  
**Under-sampling performed: Counter({1.0: 224, 2.0: 224, 3.0: 224})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({1.0: 224, 2.0: 224, 3.0: 224})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({1.0: 224, 2.0: 224, 3.0: 224})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({1.0: 224, 2.0: 224, 3.0: 224})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({1.0: 224, 2.0: 224, 3.0: 224})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({1.0: 224, 2.0: 224, 3.0: 224})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({1.0: 224, 2.0: 224, 3.0: 224})**

**Creation of the set #7**  
**Under-sampling performed: Counter({1.0: 224, 2.0: 224, 3.0: 224})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({1.0: 224, 2.0: 224, 3.0: 224})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({1.0: 224, 2.0: 224, 3.0: 224})**  
iteration: 3  
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: 4  
Determining classes statistics... 3 classes detected: {1.0: 214, 2.0: 806, 3.0: 375}  
**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: 5**

**Determining classes statistics... 3 classes detected: {1.0: 208, 2.0: 813, 3.0: 374}**

**Creation of the set #0**

**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**Creation of the set #1**

**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**Creation of the set #2**

**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**Creation of the set #3**

**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**Creation of the set #4**

**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**Creation of the set #5**

**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**Creation of the set #6**

**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**Creation of the set #7**

**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**Creation of the set #8**

**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**Creation of the set #9**

**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**iteration: 6**

**Determining classes statistics... 3 classes detected: {1.0: 207, 2.0: 820, 3.0: 368}**

**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: 7**

**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: 8  
Determining classes statistics... 3 classes detected: {1.0: 226, 2.0: 809, 3.0: 360}  
**Creation of the set #0**  
**Under-sampling performed: Counter({1.0: 226, 2.0: 226, 3.0: 226})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({1.0: 226, 2.0: 226, 3.0: 226})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({1.0: 226, 2.0: 226, 3.0: 226})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({1.0: 226, 2.0: 226, 3.0: 226})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({1.0: 226, 2.0: 226, 3.0: 226})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({1.0: 226, 2.0: 226, 3.0: 226})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({1.0: 226, 2.0: 226, 3.0: 226})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({1.0: 226, 2.0: 226, 3.0: 226})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({1.0: 226, 2.0: 226, 3.0: 226})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({1.0: 226, 2.0: 226, 3.0: 226})**  
iteration: 9  
Determining classes statistics... 3 classes detected: {1.0: 216, 2.0: 812, 3.0: 367}  
**Creation of the set #0**  
**Under-sampling performed: Counter({1.0: 216, 2.0: 216, 3.0: 216})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({1.0: 216, 2.0: 216, 3.0: 216})**

**Creation of the set #2**

**Under-sampling performed: Counter({1.0: 216, 2.0: 216, 3.0: 216})**

**Creation of the set #3**

**Under-sampling performed: Counter({1.0: 216, 2.0: 216, 3.0: 216})**

**Creation of the set #4**

**Under-sampling performed: Counter({1.0: 216, 2.0: 216, 3.0: 216})**

**Creation of the set #5**

**Under-sampling performed: Counter({1.0: 216, 2.0: 216, 3.0: 216})**

**Creation of the set #6**

**Under-sampling performed: Counter({1.0: 216, 2.0: 216, 3.0: 216})**

**Creation of the set #7**

**Under-sampling performed: Counter({1.0: 216, 2.0: 216, 3.0: 216})**

**Creation of the set #8**

**Under-sampling performed: Counter({1.0: 216, 2.0: 216, 3.0: 216})**

**Creation of the set #9**

**Under-sampling performed: Counter({1.0: 216, 2.0: 216, 3.0: 216})**

**iteration: 10**

**Determining classes statistics... 3 classes detected: {1.0: 202, 2.0: 810, 3.0: 383}**

**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: 11**

**Determining classes statistics... 3 classes detected: {1.0: 198, 2.0: 826, 3.0: 371}**

**Creation of the set #0**

**Under-sampling performed: Counter({1.0: 198, 2.0: 198, 3.0: 198})**

**Creation of the set #1**

**Under-sampling performed: Counter({1.0: 198, 2.0: 198, 3.0: 198})**

**Creation of the set #2**

**Under-sampling performed: Counter({1.0: 198, 2.0: 198, 3.0: 198})**

**Creation of the set #3**

**Under-sampling performed: Counter({1.0: 198, 2.0: 198, 3.0: 198})**

**Creation of the set #4**  
**Under-sampling performed: Counter({1.0: 198, 2.0: 198, 3.0: 198})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({1.0: 198, 2.0: 198, 3.0: 198})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({1.0: 198, 2.0: 198, 3.0: 198})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({1.0: 198, 2.0: 198, 3.0: 198})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({1.0: 198, 2.0: 198, 3.0: 198})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({1.0: 198, 2.0: 198, 3.0: 198})**  
iteration: 12  
Determining classes statistics... 3 classes detected: {1.0: 202, 2.0: 823, 3.0: 370}  
**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: 13  
Determining classes statistics... 3 classes detected: {1.0: 211, 2.0: 812, 3.0: 372}  
**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: 14**

**Determining classes statistics... 3 classes detected: {1.0: 213, 2.0: 801, 3.0: 381}**

**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: 15**

**Determining classes statistics... 3 classes detected: {1.0: 210, 2.0: 809, 3.0: 376}**

**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: 16**

**Determining classes statistics... 3 classes detected: {1.0: 206, 2.0: 815, 3.0: 374}**

**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: 17**

**Determining classes statistics... 3 classes detected: {1.0: 215, 2.0: 813, 3.0: 367}**

**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: 18

Determining classes statistics... 3 classes detected: {1.0: 218, 2.0: 803, 3.0: 374}

Creation of the set #0

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #1

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #2

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #3

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #4

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #5

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #6

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #7

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #8

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #9

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

iteration: 19

Determining classes statistics... 3 classes detected: {1.0: 218, 2.0: 818, 3.0: 359}

Creation of the set #0

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #1

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #2

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #3

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #4

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #5

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #6

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #7

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #8

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

Creation of the set #9

Under-sampling performed: Counter({1.0: 218, 2.0: 218, 3.0: 218})

iteration: 20

Determining classes statistics... 3 classes detected: {1.0: 212, 2.0: 806, 3.0: 377}

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: 21**  
**Determining classes statistics... 3 classes detected: {1.0: 209, 2.0: 809, 3.0: 377}**  
**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: 22**  
**Determining classes statistics... 3 classes detected: {1.0: 208, 2.0: 826, 3.0: 361}**  
**Creation of the set #0**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**

**Creation of the set #3**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({1.0: 208, 2.0: 208, 3.0: 208})**  
iteration: 23  
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: 24  
Determining classes statistics... 3 classes detected: {1.0: 211, 2.0: 801, 3.0: 383}  
**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: 25  
Determining classes statistics... 3 classes detected: {1.0: 217, 2.0: 807, 3.0: 371}  
**Creation of the set #0**  
**Under-sampling performed: Counter({1.0: 217, 2.0: 217, 3.0: 217})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({1.0: 217, 2.0: 217, 3.0: 217})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({1.0: 217, 2.0: 217, 3.0: 217})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({1.0: 217, 2.0: 217, 3.0: 217})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({1.0: 217, 2.0: 217, 3.0: 217})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({1.0: 217, 2.0: 217, 3.0: 217})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({1.0: 217, 2.0: 217, 3.0: 217})**  
**Creation of the set #7**  
**Under-sampling performed: Counter({1.0: 217, 2.0: 217, 3.0: 217})**  
**Creation of the set #8**  
**Under-sampling performed: Counter({1.0: 217, 2.0: 217, 3.0: 217})**  
**Creation of the set #9**  
**Under-sampling performed: Counter({1.0: 217, 2.0: 217, 3.0: 217})**  
iteration: 26  
Determining classes statistics... 3 classes detected: {1.0: 196, 2.0: 826, 3.0: 373}  
**Creation of the set #0**  
**Under-sampling performed: Counter({1.0: 196, 2.0: 196, 3.0: 196})**  
**Creation of the set #1**  
**Under-sampling performed: Counter({1.0: 196, 2.0: 196, 3.0: 196})**  
**Creation of the set #2**  
**Under-sampling performed: Counter({1.0: 196, 2.0: 196, 3.0: 196})**  
**Creation of the set #3**  
**Under-sampling performed: Counter({1.0: 196, 2.0: 196, 3.0: 196})**  
**Creation of the set #4**  
**Under-sampling performed: Counter({1.0: 196, 2.0: 196, 3.0: 196})**  
**Creation of the set #5**  
**Under-sampling performed: Counter({1.0: 196, 2.0: 196, 3.0: 196})**  
**Creation of the set #6**  
**Under-sampling performed: Counter({1.0: 196, 2.0: 196, 3.0: 196})**

**Creation of the set #7**

**Under-sampling performed: Counter({1.0: 196, 2.0: 196, 3.0: 196})**

**Creation of the set #8**

**Under-sampling performed: Counter({1.0: 196, 2.0: 196, 3.0: 196})**

**Creation of the set #9**

**Under-sampling performed: Counter({1.0: 196, 2.0: 196, 3.0: 196})**

**iteration: 27**

**Determining classes statistics... 3 classes detected: {1.0: 207, 2.0: 823, 3.0: 365}**

**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: 28**

**Determining classes statistics... 3 classes detected: {1.0: 207, 2.0: 808, 3.0: 380}**

**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: 29  
Determining classes statistics... 3 classes detected: {1.0: 207, 2.0: 819, 3.0: 369}  
**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: 30  
Determining classes statistics... 3 classes detected: {1.0: 211, 2.0: 817, 3.0: 367}  
**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: 1027, 1: 368}  
Over-sampling performed: Counter({0: 1027, 1: 736})  
iteration: 2  
Determining classes statistics... 2 classes detected: {0: 1017, 1: 378}  
Over-sampling performed: Counter({0: 1017, 1: 756})  
iteration: 3  
Determining classes statistics... 2 classes detected: {0: 1013, 1: 382}  
Over-sampling performed: Counter({0: 1013, 1: 764})  
iteration: 4  
Determining classes statistics... 2 classes detected: {0: 1023, 1: 372}  
Over-sampling performed: Counter({0: 1023, 1: 744})  
iteration: 5  
Determining classes statistics... 2 classes detected: {0: 1027, 1: 368}  
Over-sampling performed: Counter({0: 1027, 1: 736})  
iteration: 6  
Determining classes statistics... 2 classes detected: {0: 1037, 1: 358}  
Over-sampling performed: Counter({0: 1037, 1: 716})  
iteration: 7  
Determining classes statistics... 2 classes detected: {0: 1033, 1: 362}  
Over-sampling performed: Counter({0: 1033, 1: 724})  
iteration: 8  
Determining classes statistics... 2 classes detected: {0: 1023, 1: 372}  
Over-sampling performed: Counter({0: 1023, 1: 744})  
iteration: 9  
Determining classes statistics... 2 classes detected: {0: 1023, 1: 372}  
Over-sampling performed: Counter({0: 1023, 1: 744})  
iteration: 10  
Determining classes statistics... 2 classes detected: {0: 1028, 1: 367}  
Over-sampling performed: Counter({0: 1028, 1: 734})  
iteration: 11  
Determining classes statistics... 2 classes detected: {0: 1028, 1: 367}  
Over-sampling performed: Counter({0: 1028, 1: 734})  
iteration: 12  
Determining classes statistics... 2 classes detected: {0: 1020, 1: 375}  
Over-sampling performed: Counter({0: 1020, 1: 750})  
iteration: 13  
Determining classes statistics... 2 classes detected: {0: 1029, 1: 366}  
Over-sampling performed: Counter({0: 1029, 1: 732})  
iteration: 14  
Determining classes statistics... 2 classes detected: {0: 1013, 1: 382}  
Over-sampling performed: Counter({0: 1013, 1: 764})  
iteration: 15  
Determining classes statistics... 2 classes detected: {0: 1025, 1: 370}  
Over-sampling performed: Counter({0: 1025, 1: 740})  
iteration: 16  
Determining classes statistics... 2 classes detected: {0: 1027, 1: 368}

```
Over-sampling performed: Counter({0: 1027, 1: 736})
iteration: 17
Determining classes statistics... 2 classes detected: {0: 1013, 1: 382}
Over-sampling performed: Counter({0: 1013, 1: 764})
iteration: 18
Determining classes statistics... 2 classes detected: {0: 1029, 1: 366}
Over-sampling performed: Counter({0: 1029, 1: 732})
iteration: 19
Determining classes statistics... 2 classes detected: {0: 1026, 1: 369}
Over-sampling performed: Counter({0: 1026, 1: 738})
iteration: 20
Determining classes statistics... 2 classes detected: {0: 1036, 1: 359}
Over-sampling performed: Counter({0: 1036, 1: 718})
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: 1028, 1: 367}
Over-sampling performed: Counter({0: 1028, 1: 734})
iteration: 23
Determining classes statistics... 2 classes detected: {0: 1040, 1: 355}
Over-sampling performed: Counter({0: 1040, 1: 710})
iteration: 24
Determining classes statistics... 2 classes detected: {0: 1021, 1: 374}
Over-sampling performed: Counter({0: 1021, 1: 748})
iteration: 25
Determining classes statistics... 2 classes detected: {0: 1014, 1: 381}
Over-sampling performed: Counter({0: 1014, 1: 762})
iteration: 26
Determining classes statistics... 2 classes detected: {0: 1013, 1: 382}
Over-sampling performed: Counter({0: 1013, 1: 764})
iteration: 27
Determining classes statistics... 2 classes detected: {0: 1007, 1: 388}
Over-sampling performed: Counter({0: 1007, 1: 776})
iteration: 28
Determining classes statistics... 2 classes detected: {0: 1027, 1: 368}
Over-sampling performed: Counter({0: 1027, 1: 736})
iteration: 29
Determining classes statistics... 2 classes detected: {0: 1021, 1: 374}
Over-sampling performed: Counter({0: 1021, 1: 748})
iteration: 30
Determining classes statistics... 2 classes detected: {0: 1028, 1: 367}
Over-sampling performed: Counter({0: 1028, 1: 734})
iteration: 1
Determining classes statistics... 3 classes detected: {1.0: 216, 2.0: 803, 3.0: 376}
Over-sampling performed: Counter({2.0: 803, 3.0: 752, 1.0: 432})
iteration: 2
Determining classes statistics... 3 classes detected: {1.0: 205, 2.0: 817, 3.0: 373}
```

```
Over-sampling performed: Counter({2.0: 817, 3.0: 746, 1.0: 410})
iteration: 3
Determining classes statistics... 3 classes detected: {1.0: 209, 2.0: 808, 3.0: 378}
Over-sampling performed: Counter({2.0: 808, 3.0: 756, 1.0: 418})
iteration: 4
Determining classes statistics... 3 classes detected: {1.0: 214, 2.0: 819, 3.0: 362}
Over-sampling performed: Counter({2.0: 819, 3.0: 724, 1.0: 428})
iteration: 5
Determining classes statistics... 3 classes detected: {1.0: 217, 2.0: 800, 3.0: 378}
Over-sampling performed: Counter({2.0: 800, 3.0: 756, 1.0: 434})
iteration: 6
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: 7
Determining classes statistics... 3 classes detected: {1.0: 210, 2.0: 820, 3.0: 365}
Over-sampling performed: Counter({2.0: 820, 3.0: 730, 1.0: 420})
iteration: 8
Determining classes statistics... 3 classes detected: {1.0: 202, 2.0: 820, 3.0: 373}
Over-sampling performed: Counter({2.0: 820, 3.0: 746, 1.0: 404})
iteration: 9
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: 10
Determining classes statistics... 3 classes detected: {1.0: 218, 2.0: 792, 3.0: 385}
Over-sampling performed: Counter({2.0: 792, 3.0: 770, 1.0: 436})
iteration: 11
Determining classes statistics... 3 classes detected: {1.0: 213, 2.0: 804, 3.0: 378}
Over-sampling performed: Counter({2.0: 804, 3.0: 756, 1.0: 426})
iteration: 12
Determining classes statistics... 3 classes detected: {1.0: 219, 2.0: 811, 3.0: 365}
Over-sampling performed: Counter({2.0: 811, 3.0: 730, 1.0: 438})
iteration: 13
Determining classes statistics... 3 classes detected: {1.0: 216, 2.0: 808, 3.0: 371}
Over-sampling performed: Counter({2.0: 808, 3.0: 742, 1.0: 432})
iteration: 14
Determining classes statistics... 3 classes detected: {1.0: 210, 2.0: 814, 3.0: 371}
Over-sampling performed: Counter({2.0: 814, 3.0: 742, 1.0: 420})
iteration: 15
Determining classes statistics... 3 classes detected: {1.0: 205, 2.0: 815, 3.0: 375}
Over-sampling performed: Counter({2.0: 815, 3.0: 750, 1.0: 410})
iteration: 16
Determining classes statistics... 3 classes detected: {1.0: 208, 2.0: 808, 3.0: 379}
Over-sampling performed: Counter({2.0: 808, 3.0: 758, 1.0: 416})
iteration: 17
Determining classes statistics... 3 classes detected: {1.0: 210, 2.0: 818, 3.0: 367}
Over-sampling performed: Counter({2.0: 818, 3.0: 734, 1.0: 420})
iteration: 18
Determining classes statistics... 3 classes detected: {1.0: 194, 2.0: 825, 3.0: 376}
```

```
Over-sampling performed: Counter({2.0: 825, 3.0: 752, 1.0: 388})
iteration: 19
Determining classes statistics... 3 classes detected: {1.0: 215, 2.0: 813, 3.0: 367}
Over-sampling performed: Counter({2.0: 813, 3.0: 734, 1.0: 430})
iteration: 20
Determining classes statistics... 3 classes detected: {1.0: 208, 2.0: 829, 3.0: 358}
Over-sampling performed: Counter({2.0: 829, 3.0: 716, 1.0: 416})
iteration: 21
Determining classes statistics... 3 classes detected: {1.0: 215, 2.0: 810, 3.0: 370}
Over-sampling performed: Counter({2.0: 810, 3.0: 740, 1.0: 430})
iteration: 22
Determining classes statistics... 3 classes detected: {1.0: 207, 2.0: 803, 3.0: 385}
Over-sampling performed: Counter({2.0: 803, 3.0: 770, 1.0: 414})
iteration: 23
Determining classes statistics... 3 classes detected: {1.0: 213, 2.0: 807, 3.0: 375}
Over-sampling performed: Counter({2.0: 807, 3.0: 750, 1.0: 426})
iteration: 24
Determining classes statistics... 3 classes detected: {1.0: 218, 2.0: 810, 3.0: 367}
Over-sampling performed: Counter({2.0: 810, 3.0: 734, 1.0: 436})
iteration: 25
Determining classes statistics... 3 classes detected: {1.0: 206, 2.0: 810, 3.0: 379}
Over-sampling performed: Counter({2.0: 810, 3.0: 758, 1.0: 412})
iteration: 26
Determining classes statistics... 3 classes detected: {1.0: 214, 2.0: 805, 3.0: 376}
Over-sampling performed: Counter({2.0: 805, 3.0: 752, 1.0: 428})
iteration: 27
Determining classes statistics... 3 classes detected: {1.0: 199, 2.0: 826, 3.0: 370}
Over-sampling performed: Counter({2.0: 826, 3.0: 740, 1.0: 398})
iteration: 28
Determining classes statistics... 3 classes detected: {1.0: 202, 2.0: 814, 3.0: 379}
Over-sampling performed: Counter({2.0: 814, 3.0: 758, 1.0: 404})
iteration: 29
Determining classes statistics... 3 classes detected: {1.0: 214, 2.0: 805, 3.0: 376}
Over-sampling performed: Counter({2.0: 805, 3.0: 752, 1.0: 428})
iteration: 30
Determining classes statistics... 3 classes detected: {1.0: 206, 2.0: 815, 3.0: 374}
Over-sampling performed: Counter({2.0: 815, 3.0: 748, 1.0: 412})
```

Process finished with exit code 0