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File - apply_fca
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C:\Users\AMIT\AppData\Local\Programs\Python\Python37\python.exe "C:/Users/AMIT/Documents/Python Sc
() > ('data integration', 'frequent patterns', 'supervised learning', 'neural chips', 'core memory
('project 2',) > ('data integration', 'frequent patterns')
('project 3',) > ('data integration', 'supervised learning', 'core memory')
('project 4',) > ('data integration', 'supervised learning', 'neural chips')
('project 3', 'project 4') > ('data integration', 'supervised learning')
('project 1', 'project 4', 'project 5') > ('supervised learning', 'neural chips')
('project 2', 'project 3', 'project 4') > ('data integration',)
('project 1', 'project 3', 'project 4', 'project 5') > ('supervised learning',)
('project 1', 'project 2', 'project 3', 'project 4', 'project 5') > ()
abstract concept matrix
[1, 1, 0, 0, 0, 0, 1, 0, 0, 0]
[1, 0, 1, 0, 1, 0, 0, 1, 0, 0]
[1, 0, 1, 1, 0, 0, 0, 0, 1, 0]
[1, 0, 1, 0, 0, 0, 0, 1, 1, 0]
[0, 0, 1, 1, 0, 1, 0, 0, 1, 1]
[1, 0, 0, 0, 0, 0, 1, 1, 1, 0]
[0, 0, 1, 0, 0, 1, 0, 1, 1, 1]
() > ('data integration', 'frequent patterns', 'supervised learning', 'neural chips', 'core memory
('student1',) > ('data integration', 'frequent patterns', 'core memory')
('student2',) > ('frequent patterns', 'supervised learning')
('student3',) > ('data integration', 'neural chips', 'core memory')
('student4',) > ('data integration', 'supervised learning')
('student5',) > ('frequent patterns', 'neural chips', 'core memory')
('student1', 'student3') > ('data integration', 'core memory')
('student1', 'student5') > ('frequent patterns', 'core memory')
('student2', 'student4') > ('supervised learning',)
('student3', 'student5') > ('neural chips', 'core memory')
('student1', 'student2', 'student5') > ('frequent patterns',)
('student1', 'student3', 'student4') > ('data integration',)
('student1', 'student3', 'student5') > ('core memory',)
('student1', 'student2', 'student3', 'student4', 'student5') > ()
student concept matrix
[1, 1, 0, 0, 1, 1, 0, 0, 0, 0]
[0, 1, 1, 0, 0, 0, 1, 0, 0, 0]
[1, 0, 0, 1, 1, 0, 0, 1, 0, 0]
[1, 0, 1, 0, 0, 0, 0, 0, 1, 0]
[0, 1, 0, 1, 1, 0, 0, 0, 0, 1]
[1, 0, 0, 0, 1, 1, 0, 1, 0, 0]
[0, 1, 0, 0, 1, 1, 0, 0, 0, 1]
[0, 0, 1, 0, 0, 0, 1, 0, 1, 0]
[0, 0, 0, 1, 1, 0, 0, 1, 0, 1]
[0, 1, 0, 0, 0, 1, 1, 0, 0, 1]
[1, 0, 0, 0, 0, 1, 0, 1, 1, 0]
[0, 0, 0, 0, 1, 1, 0, 1, 0, 1]
aff mat
  2 | 2 | 1 | 1 | 0 |
                      1 |
  1  1  1  1  1
                      01
                          11
  1 | 2 | 2 |
             1 |
                 1 |
                      1 |
  1 2 2 2 2
                 1 |
                      1|
     1 |
  11
         11
             0.1
                  11
                      01
                          01
  1 | 2 |
         1 |
             1 |
                  0 |
                      1 |
  1 | 1 |
          0 |
             0 |
                  0 |
                      0 |
  0 |
     1 |
         1 |
             1 |
                 1 |
                      0 |
                          1 |
  0 |
     1 |
         1 |
              0 |
                 1 |
                      0 |
                          0 |
  1 | 0 |
         0| 0| 0|
                     0 |
                          01
  11
     1 |
         1 |
             1 | 0 |
                      11
                          0 |
          0 |
              0 0 0 0 0
student preferences
0 [0, 1, 2, 3, 5, 4, 6]
```

```
File - apply_fca
1 [0, 1, 2, 3, 4, 6, 5]
2 [1, 2, 0, 3, 4, 5, 6]
3 [1, 2, 3, 0, 4, 5, 6]
4 [0, 1, 2, 4, 3, 5, 6]
5 [1, 0, 2, 3, 5, 4, 6]
6 [0, 1, 2, 3, 4, 5, 6]
7 [1, 2, 3, 4, 6, 0, 5]
8 [1, 2, 4, 0, 3, 5, 6]
9 [0, 1, 2, 3, 4, 5, 6]
10 [0, 1, 2, 3, 5, 4, 6]
11 [1, 0, 2, 3, 4, 5, 6]
abstract preferences
0 [0, 1, 2, 3, 4, 5, 6, 9, 10, 7, 8, 11]
1 [0, 2, 3, 5, 1, 4, 6, 7, 8, 10, 11, 9]
2 [2, 3, 0, 1, 4, 5, 7, 8, 10, 6, 9, 11]
3 [3, 0, 1, 2, 5, 7, 10, 4, 6, 8, 9, 11]
4 [1, 2, 3, 4, 7, 8, 0, 5, 6, 9, 10, 11]
5 [0, 2, 3, 5, 10, 1, 4, 6, 7, 8, 9, 11]
6 [1, 3, 7, 0, 2, 4, 5, 6, 8, 9, 10, 11]
task concept-student concept pairs
[(0, 0), (1, 2), (0, 1), (1, 3), (0, 4), (1, 5), (0, 6), (1, 7), (0, 9), (1, 8), (0, 10), (1, 11)]
for pair ( 0 , 0 )
for pair ( 1 , 2 )
stable percentage: 0.5
for pair ( 0 , 1 )
for pair ( 1 , 3 )
for pair ( 0 , 4 )
stable percentage: 0.25
for pair (1,5)
for pair (0,6)
for pair (1,7)
for pair ( 0 , 9 )
stable percentage: 0.5
for pair (1,8)
stable percentage: 0.25
for pair ( 0 , 10 )
stable percentage: 0.5
for pair ( 1 , 11 )
______
data integration | frequent patterns | project 2 | > data integration | frequent patterns | core
data integration | supervised learning | core memory | project 3 | > data integration | neural ch
data integration | frequent patterns | project 2 | > frequent patterns | supervised learning | st
data integration | supervised learning | core memory | project 3 | > data integration | supervise
data integration | frequent patterns | project 2 | > frequent patterns | neural chips | core memo
data integration | supervised learning | core memory | project 3 | > data integration | core memo
data integration | frequent patterns | project 2 | > frequent patterns | core memory | student1 |
data integration | supervised learning | core memory | project 3 | > supervised learning | studen
data integration | frequent patterns | project 2 | > frequent patterns | student1 | student2 | st
data integration | supervised learning | core memory | project 3 | > neural chips | core memory |
data integration | frequent patterns | project 2 | > data integration | student1 | student3 | stu
data integration | supervised learning | core memory | project 3 | > core memory | student1 | stu
```

File - apply_fca

```
project part ...
project 2 > {'student2', 'student1', 'student4', 'student3', 'student5'}
project 3 > {'student2', 'student1', 'student4', 'student3', 'student5'}

student part ...
student1 > {'project 2', 'project 3'}
student3 > {'project 2', 'project 3'}
student2 > {'project 2', 'project 3'}
student4 > {'project 2', 'project 3'}
student5 > {'project 2', 'project 3'}
Process finished with exit code 0
```