1|Toy Story (1995)|01-Jan-1995||http://us.imdb.com/M/title-exact?Toy%20Story%20(1995)|0|0|0|1|1|1|0|0|0|0|0|0|0|0|0|0|0|0|0

2|GoldenEye (1995)|01-Jan-1995||http://us.imdb.com/M/title-exact?GoldenEye%20(1995)|0|1|1|0|0|0|0|0|0|0|0|0|0|0|0|0|1|0|0

3|Four Rooms (1995)|01-Jan-1995||http://us.imdb.com/M/title-exact?Four%20Rooms%20(1995)|0|0|0|0|0|0|0|0|0|0|0|0|0|0|0|0|1|0|0

4|Get Shorty (1995)|01-Jan-1995||http://us.imdb.com/M/title-exact?Get%20Shorty%20(1995)|0|1|0|0|0|1|0|0|1|0|0|0|0|0|0|0|0|0|0

5|Copycat (1995)|01-Jan-1995||http://us.imdb.com/M/title-exact?Copycat%20(1995)|0|0|0|0|0|0|1|0|1|0|0|0|0|0|0|0|1|0|0

```
1   2   3   100
1   4   3   100
2   1   2   100
2   2   3   100
2   3   2   100
2   4   4   100
3   2   4   100
3   3   2   100
3   4   5   100
4   3   4   100
4   4   3   100
4   5   4   100
5   1   3   100
5   2   3   100
5   4   5   100
5   5   5   100
```

List of movies are:

{ '1': 'Toy Story (1995)',
  '2': 'GoldenEye (1995)',
  '3': 'Four Rooms (1995)',
  '4': 'Get Shorty (1995)',
  '5': 'Copycat (1995)'}

The preference list is:

{ '1': {'GoldenEye (1995)': 3.0,
        'Get Shorty (1995)': 3.0},
  '2': { 'Four Rooms (1995)': 2.0,
        'Get Shorty (1995)': 4.0,
        'GoldenEye (1995)': 3.0,
        'Toy Story (1995)': 2.0},
  '3': { 'Four Rooms (1995)': 2.0,
        'Get Shorty (1995)': 5.0,
        'GoldenEye (1995)': 4.0},
  '4': { 'Copycat (1995)': 4.0,

'Four Rooms (1995)': 4.0,
'Get Shorty (1995)': 3.0},
'5': { 'Copycat (1995)': 5.0,
'Get Shorty (1995)': 5.0,
'GoldenEye (1995)': 3.0,
'Toy Story (1995)': 3.0}}

==
Compute pair-wise similarity, similarity between users "1" and "2"
similarity between user 1 and user 2
prefs["1"]: {'GoldenEye (1995)': 3.0,
        'Get Shorty (1995)': 3.0}
prefs["2"]: { 'Four Rooms (1995)': 2.0,
         'Get Shorty (1995)': 4.0,
         'GoldenEye (1995)': 3.0,
         'Toy Story (1995)': 2.0}

Shared items, si: ['GoldenEye (1995)', 'Get Shorty (1995)']

distance = sqrt((prefs["1"][si[0]]-prefs["2"][si[0]])^2 +
        (prefs["2"][si[1]]-prefs["2"][si[1]]^2))
      = sqrt((prefs["1"]['GoldenEye'] - prefs["2"]['GoldenEye'])^2 +
        (prefs["2"]['Get Shorty'] - prefs["2"]['Get Shorty']^2))
      = sqrt ((3.0-3.0)^2 + (3.0-4.0)^2) = 1.0

similarity = 1/(1+distance) = 0.5

==

Final rating:

[(4.25, 'Copycat (1995)'),
(3.1055728090000843, 'Four Rooms (1995)'),
(2.4000000000000004, 'Toy Story (1995)')]