cfm algorithm:

Translated by Jian Song

Software Environment:

Scala code runner version 2.12.2

Java version "1.8.0_102"

Java(TM) SE Runtime Environment (build 1.8.0_102-b14)

Java HotSpot(TM) 64-Bit Server VM (build 25.102-b14, mixed mode)

Input file format:

```
4
6
0,1
0,2
0,3
1,3
2,3
1,2
```

Note: The first line represents the number of nodes.

The second line represents the number of edges.

-i input file

-o output file

Example:

karate data set:

Input file karate_edges_no_weight.txt

scala -J-Xmx7g -classpath communitydiscovery_M13.jar main.UndigraphMain -i karate_edges_no_weight.txt -o karate.txt

```
C:\Users\sj\Desktop\Jupyter\CFM>scala -J-Xmx7g -classpath communitydiscovery_M13.jar main.UndigraphMain -i karate_edges_
no_weight.txt -o karate.txt
正在处理社区： 1
maxEdge: ((33,34),(290.01,-1))
正在处理社区： 2
maxEdge: ((1,2),(175.01,-1))
正在处理社区： 3
stop find the communities.
核心算法运行时间：38
```

Output file:

```
34
1:2
2:2
3:1,2
4:2
5:2
6:2
7:2
8:2
9:1,2
10:1,2
11:2
12:2
13:2
14:2
15:1
```

Output file karate.txt_NC.txt

Note:

The first line represents the number of nodes.

Node:community

```
2
1:3,9,10,15,16,19,21,23,24,25,26,27,28,29,30,31,32,33,34
2:1,2,3,4,5,6,7,8,9,10,11,12,13,14,17,18,20,22,31
```

Output file karate.txt_community.txt 1

Note:

The first line represents the number of communitys

Community:nodes