eg of counterexample1

13

1:2,8,9,4,11,3,13

2:1,8,4,5,3,7,10

3:1,13,12,4,6,7,2

4:1,11,12,3,6,5,2,10,9

5:2,4,6,7

6:3,4,5,7

7:2,5,6,3

8:1,2,10,9

9:1,8,4,10

10:2,4,8,9

11:1,4,12,13

12:3,4,11,13

13:1,3,11,12

eg of counterexample2

15

1:2,4,5,3

2:1,4,7,9,6,3

3:1,2,6,15,14,5

4:1,2,7,8,6,5

5:1,3,14,13,11,10,6,4

6:4,5,10,12,13,15,3,2,9,8

7:4,8,2,9

8:4,7,9,6

9:7,8,2,6

10:5,6,11,12

11:5,10,12,13

12:6,10,11,13

13:5,11,12,6,15,14

14:3,5,13,15

15:3,6,13,14

eg of nestedst

15

1:2,4,5,6,3

2:1,4,7,8,3

3:1,6,9,8,2

4:1,2,7,5

5:1,6,4,7,10,11,12,9

6:1,3,5,9

7:2,4,5,10,13,15,9,8

8:2,7,3,9

9:3,6,5,12,14,15,7,8

10:5,11,13,7

11:5,10,12,13,14

12:5,11,14,9

13:7,10,11,14,15

14:13,9,11,12,15

15:7,9,13,14

eg from Papers

1(a)

5

1:2,4,5

2:1,3,4,5

3:2,4,5

4:1,2,3,5

5:1,2,3,4

eg of alams

9

1:2,9,8,3

2:1,9,6,5,4,3

3:1,8,4,2

4:2,3,8,5

5:2,4,8,7,6

6:2,5,7,9

7:6,5,8,9

8:5,4,3,1,9,7

9:6,7,8,1,2

eg of liao

12

1:2,12,7,6,3

2:12,10,5,4,3,1

3:2,4,5,9,6,1

4:2,5,3

5:2,10,9,3,4

6:3,9,8,7,1

7:6,8,12,1

8:9,10,11,12,7,6

9:5,10,8,6,3

10:2,12,11,8,9,5

11:10,12,8

12:2,1,7,8,11,10

eg with 4 sts

18

1:2,5,7,8,4,3

2:3,6,18,17,5,1

3:1,4,13,15,6,2

4:1,3,13,14,6,11,10,5,9,8

5:1,2,17,16,6,12,10,4,9,7

6:3,2,18,16,5,12,11,4,14,15

7:5,9,8,1

8:1,7,9,4

9:5,7,8,4

10:4,11,12,5

11:10,4,6,12

12:10,11,6,5

13:3,4,14,15

14:4,13,15,6

15:13,3,6,14

16:5,6,18,17

17:16,18,2,5

18:16,6,2,17

another eg

with 3 cases:

1 case

12

1:5,2,11,3,6

2:5,1,11,3,4

3:1,6,4,2,11

4:3,6,12,5,2

5:1,2,4,12,6,7,8,10

6:1,3,4,12,5,7,9,10

7:5,6,9,8

8:7,9,10,5

9:7,6,10,8

10:5,8,9,6

11:1,2,3

12:4,5,6

2 case

11

1:5,2,11,3,6

2:5,1,11,3,4

3:1,6,4,2,11

4:3,6,5,2

5:1,2,4,6,7,8,10

6:1,3,4,5,7,9,10

7:5,6,9,8

8:7,9,10,5

9:7,6,10,8

10:5,8,9,6

11:1,2,3

3 case

10

1:5,2,3,6

2:5,1,3,4

3:1,6,4,2

4:3,6,5,2

5:1,2,4,6,7,8,10

6:1,3,4,5,7,9,10

7:5,6,9,8

8:7,9,10,5

9:7,6,10,8

10:5,8,9,6

Main example

24

1:2,3,4,10,9,5,7,6

2:1,6,7,11,12,14,4,15,17,16,20,19,3

3:1,2,19,20,24,22,23,4

4:1,3,10,9,13,12,14,2,15,17,18,22,23

5:1,9,7

6:1,7,2

7:1,6,2,11,12,8,9,5

8:12,7,9

9:1,5,7,8,12,13,4,10,1

10:4,9,1

11:7,2,12

12:2,11,7,8,9,13,4,14

13:4,9,12

14:2,12,4

15:2,4,17

16:2,20,17

17:2,15,4,18,22,21,20,16

18:4,17,22

19:3,2,20

20:16,17,21,22,24,19,2

21:20,22,17

22:4,18,17,21,20,24,3,23

23:4,3,22

24:3,20,22