F H

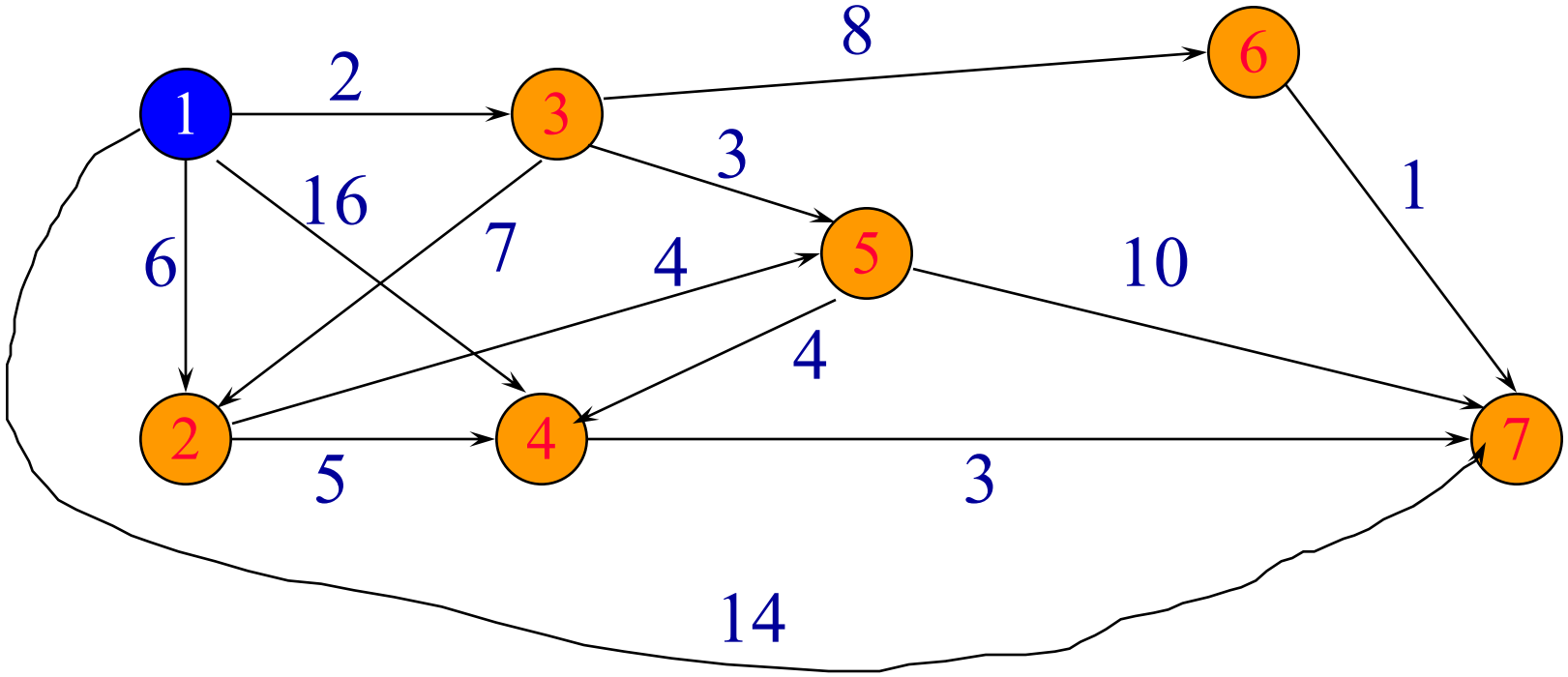
	Actual	Amortized
Insert	O(1)	O(1)
Remove min (or max)	O(n)	O(log n)
Meld	O(1)	O(1)
Remove	O(n)	O(log n)
Decrease key (or increase)	O(n)	O(1)

A

F A .

- . . . / / 5536; I L ;
- COP5536 FHA.

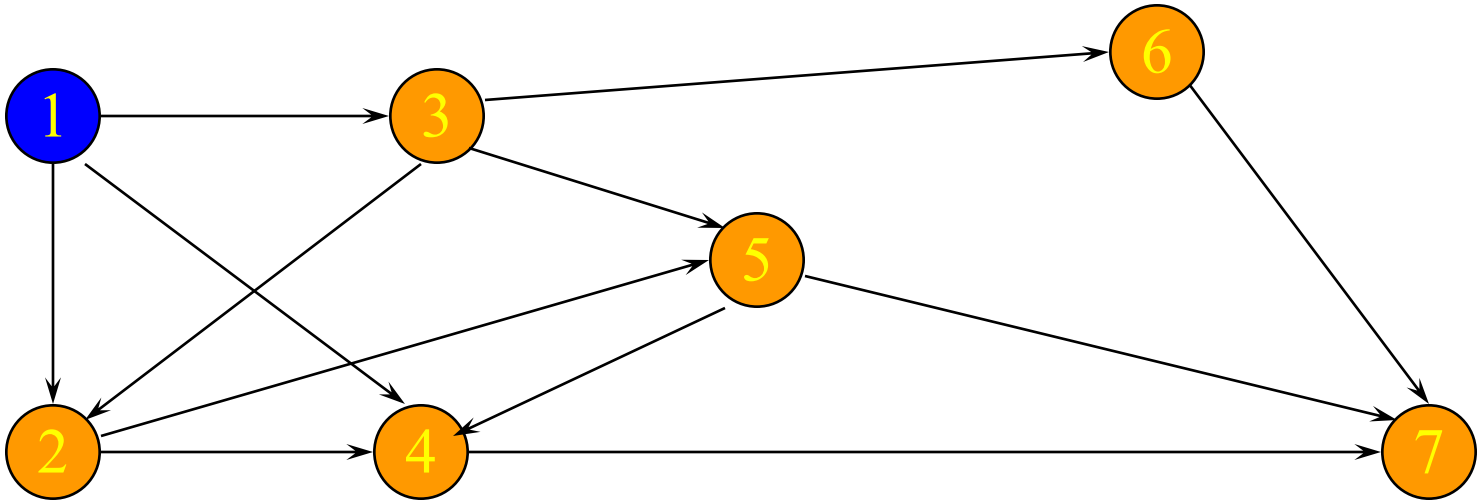
A D P



G A D

K D .

G A D



O O ()

.

- D O( ) ,

.

D ().

- D O( ) ,

.

A .

- O(^{2})

.

M .

- O(+)

.

F .

- O(+)

.

P M -C A

A .

- O(^{2})

M .

- O(+)

F .

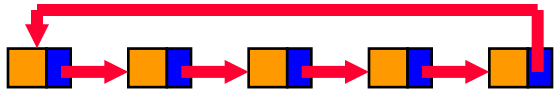
- O(+)

M F H

C .

B .

N



D , C , D

L

-

P

- P

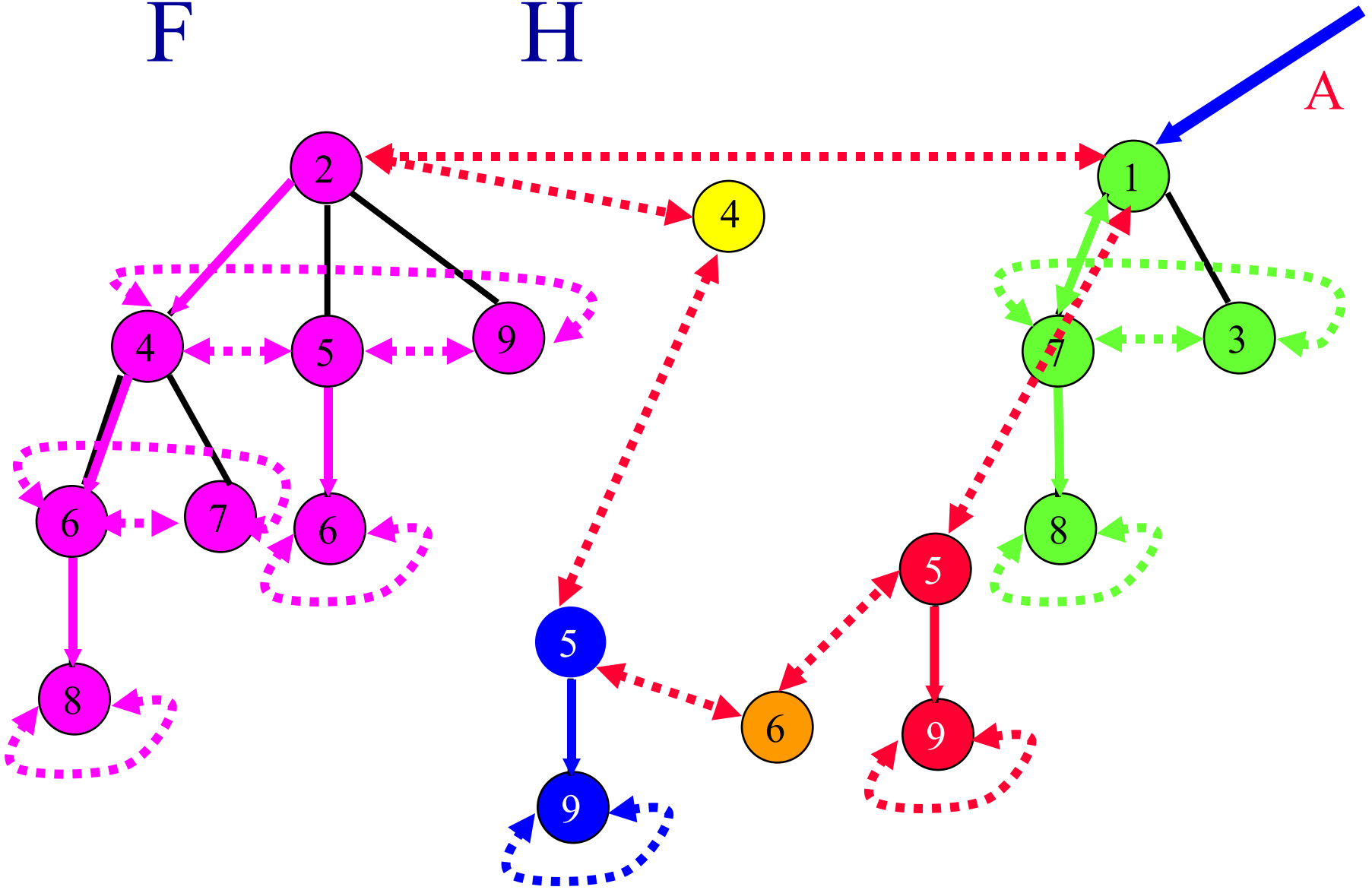
C C

-

-

-

F H



D , P C C .

(N)

N F

.

N =>

.

- I ,

.

(N)

N

.

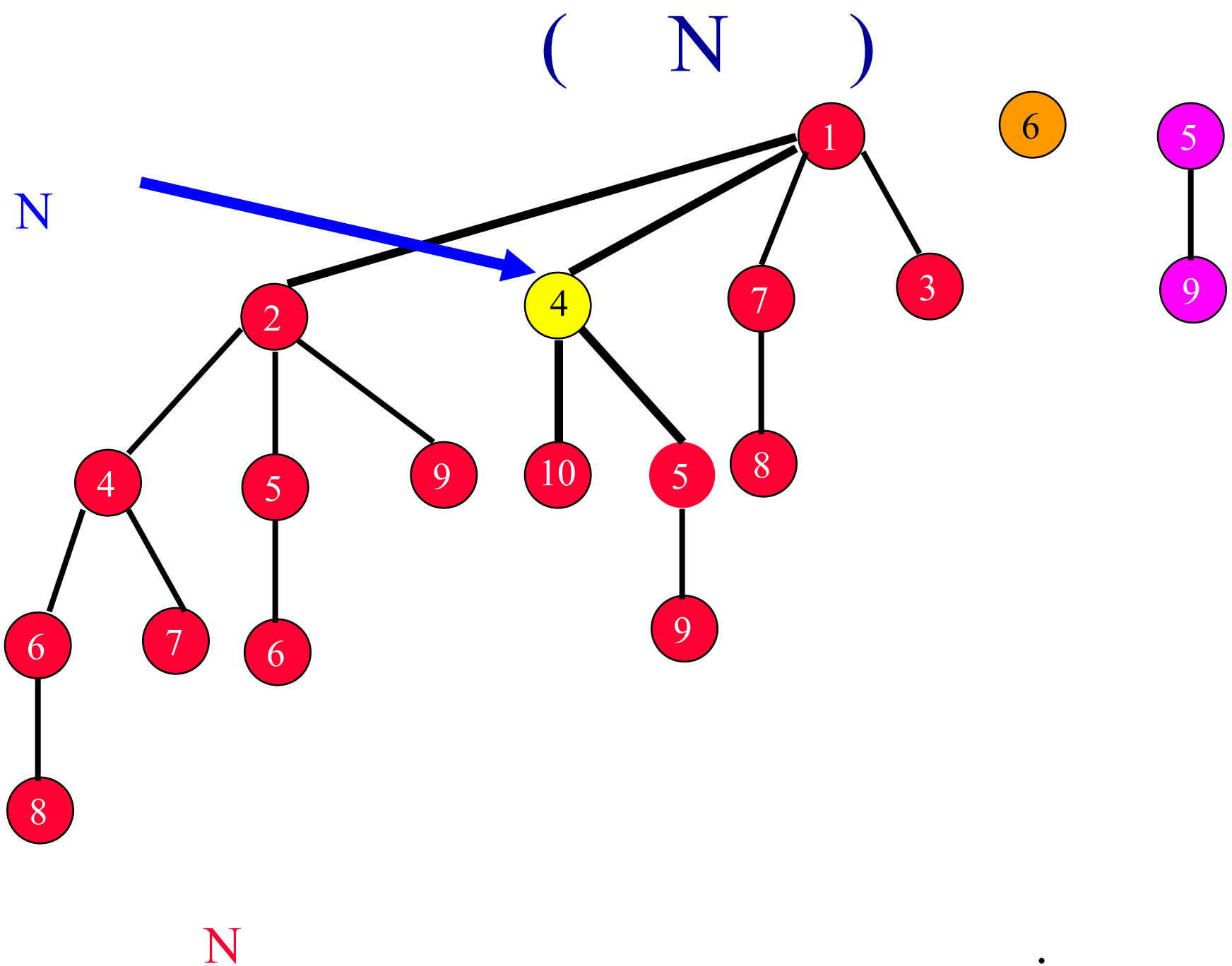
- N .
- C .
- N .
- C - N ;

.

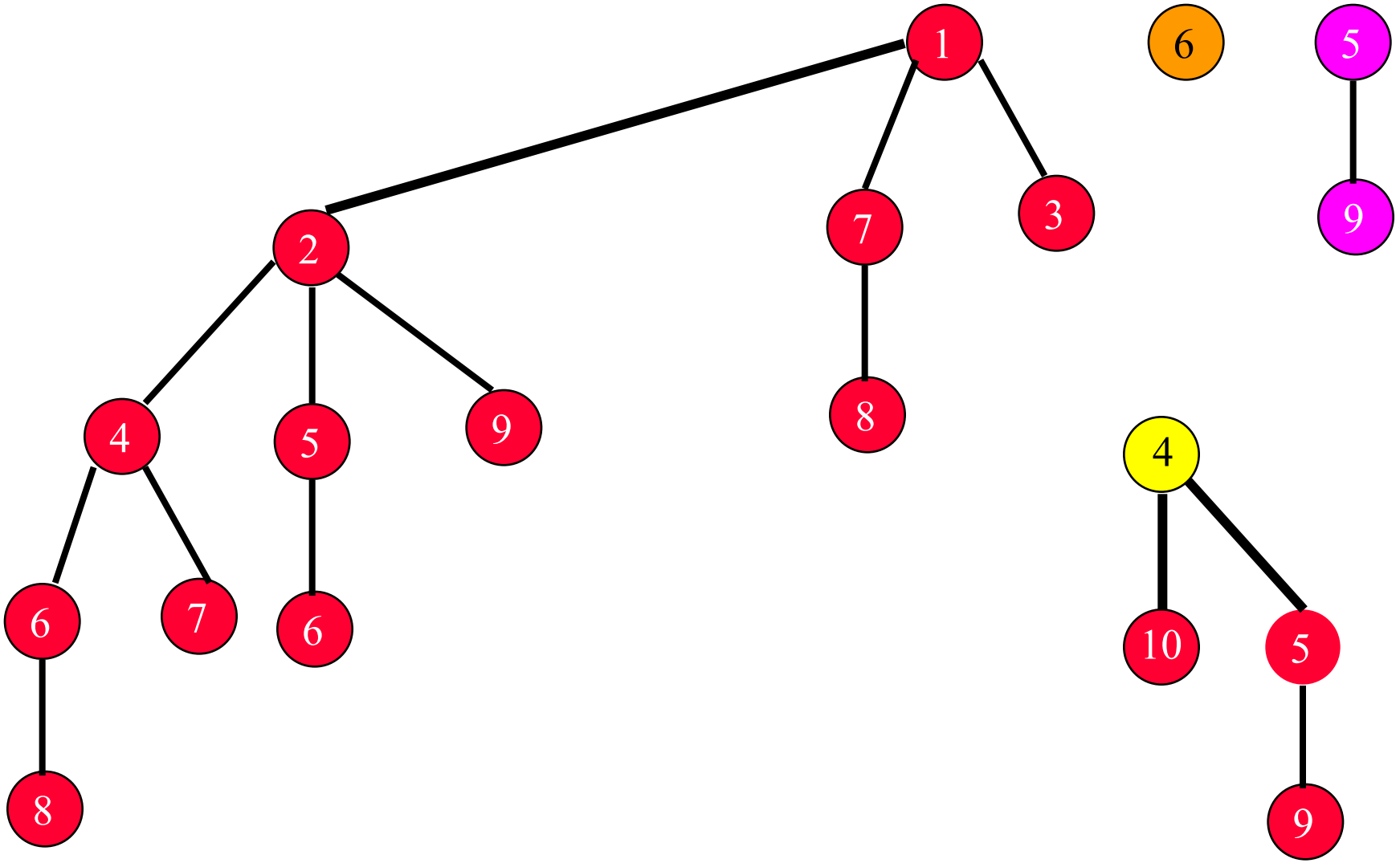
- F N .

I , O( ) (

N O( )).

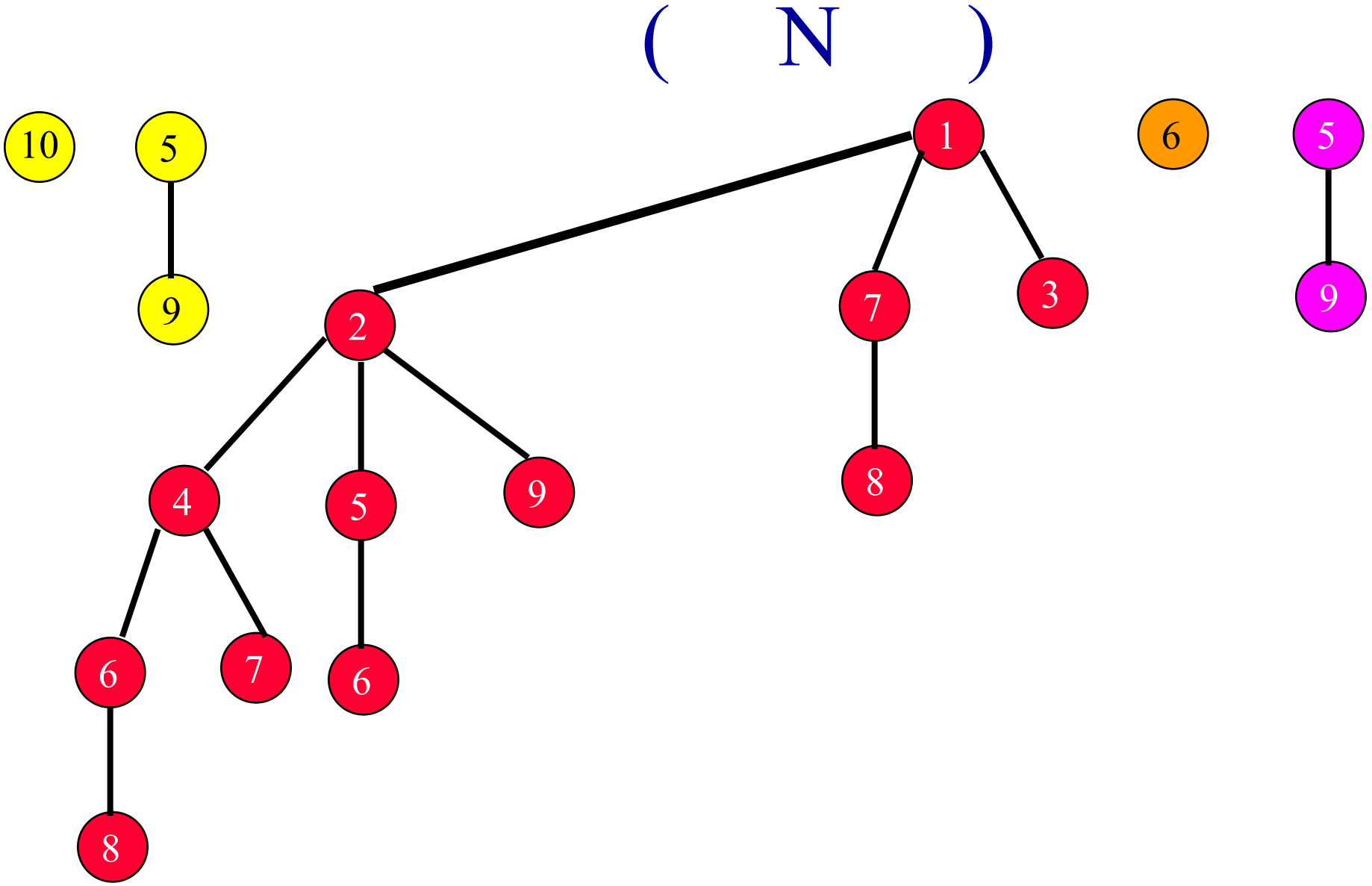

(N)
N
1
2
4
7
3
4
5
9
10
5
8
6
7
6
9
8
6
5
9
N

(N)

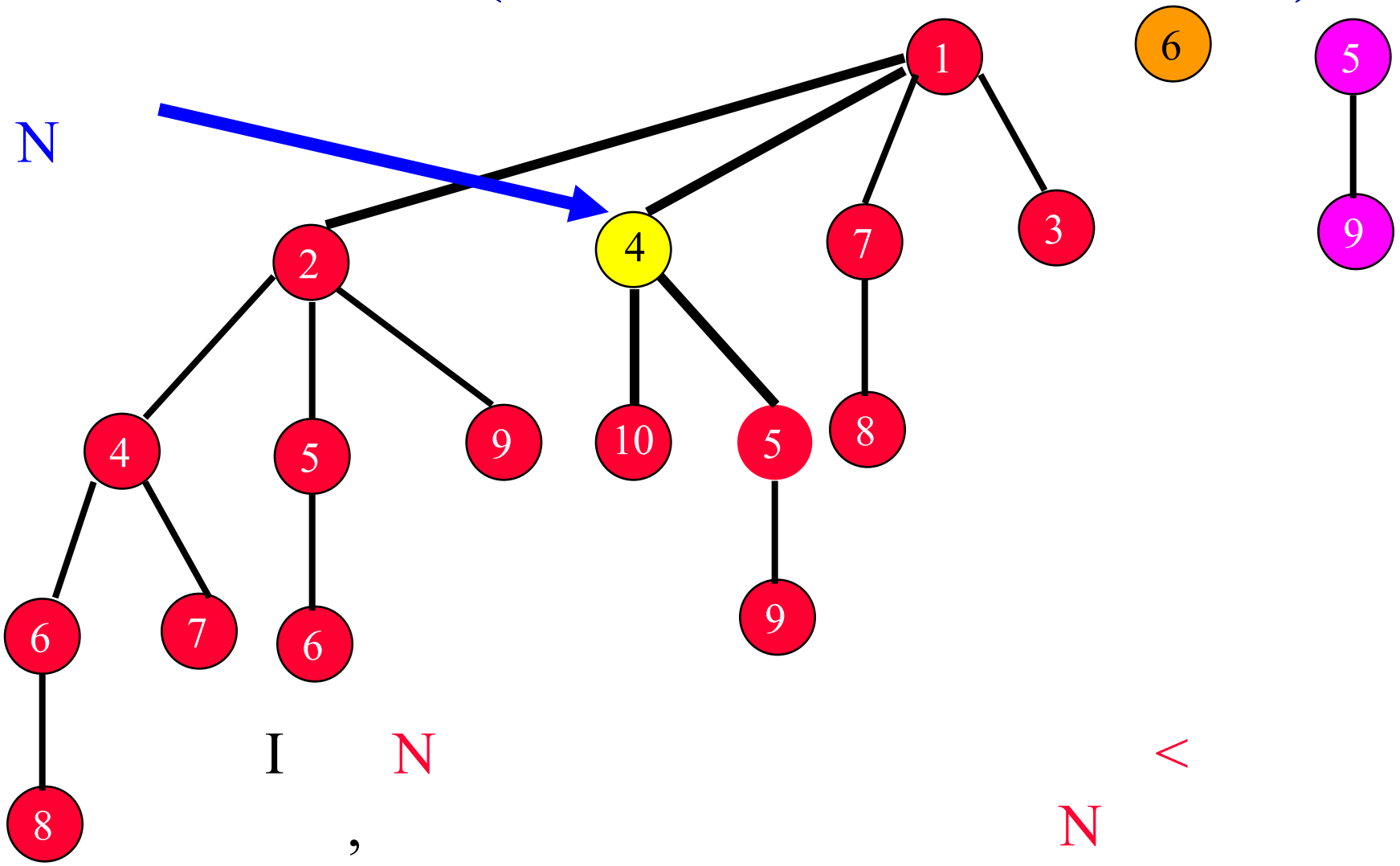


C - N

N .


(N)
10
5
9
1
2
4
5
9
6
7
6
8
7
3
8
6
5
9

D K (N , A)



I N <

N

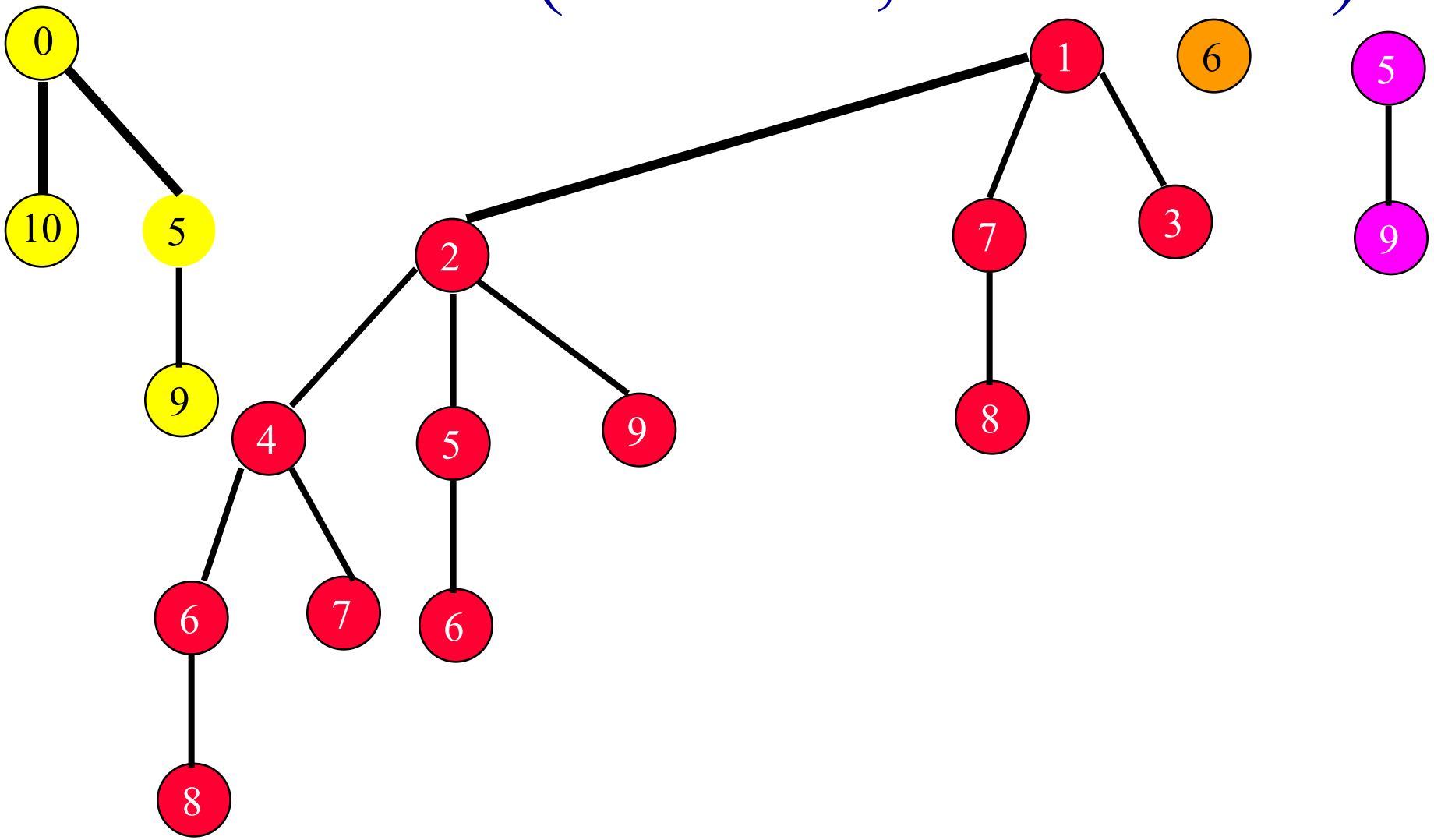
,

.

I -

.

D K (N , A)



C C

N

,

N .

E ( )

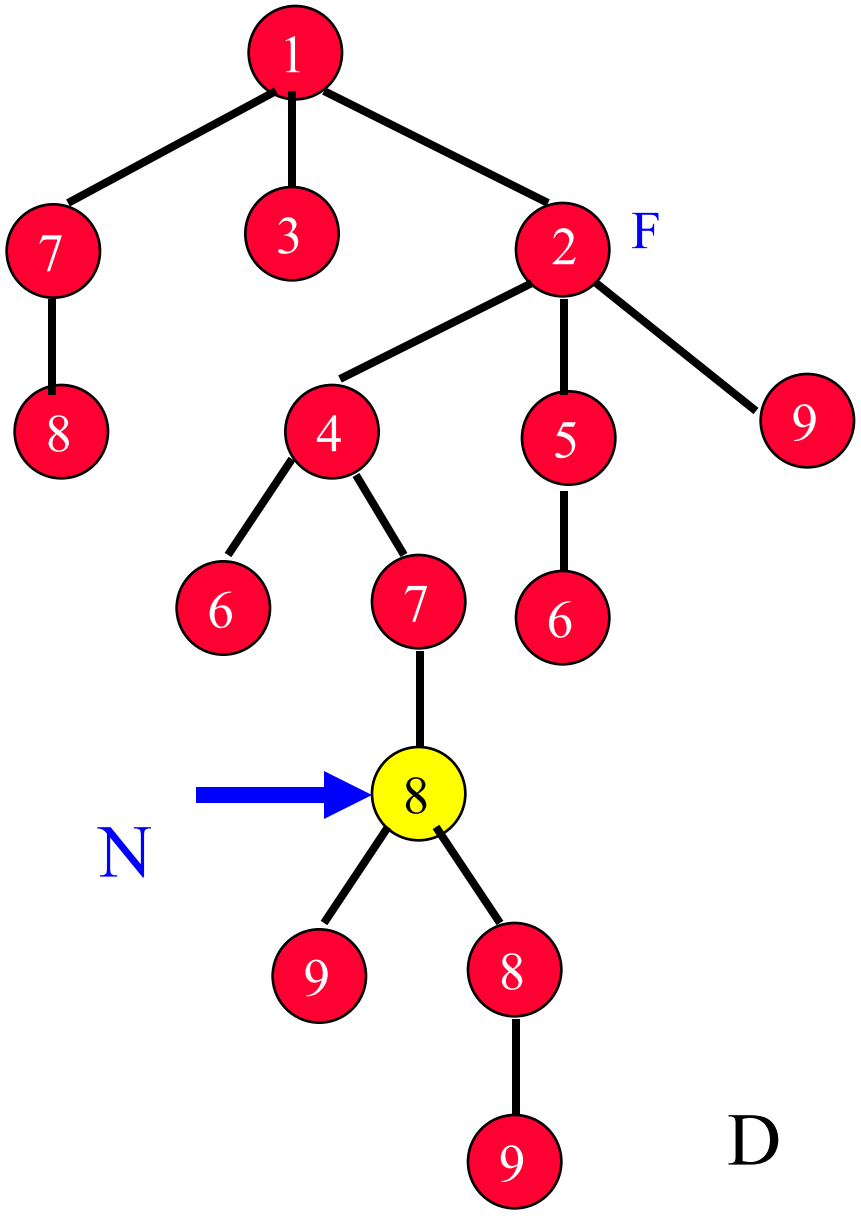
C C =

- .

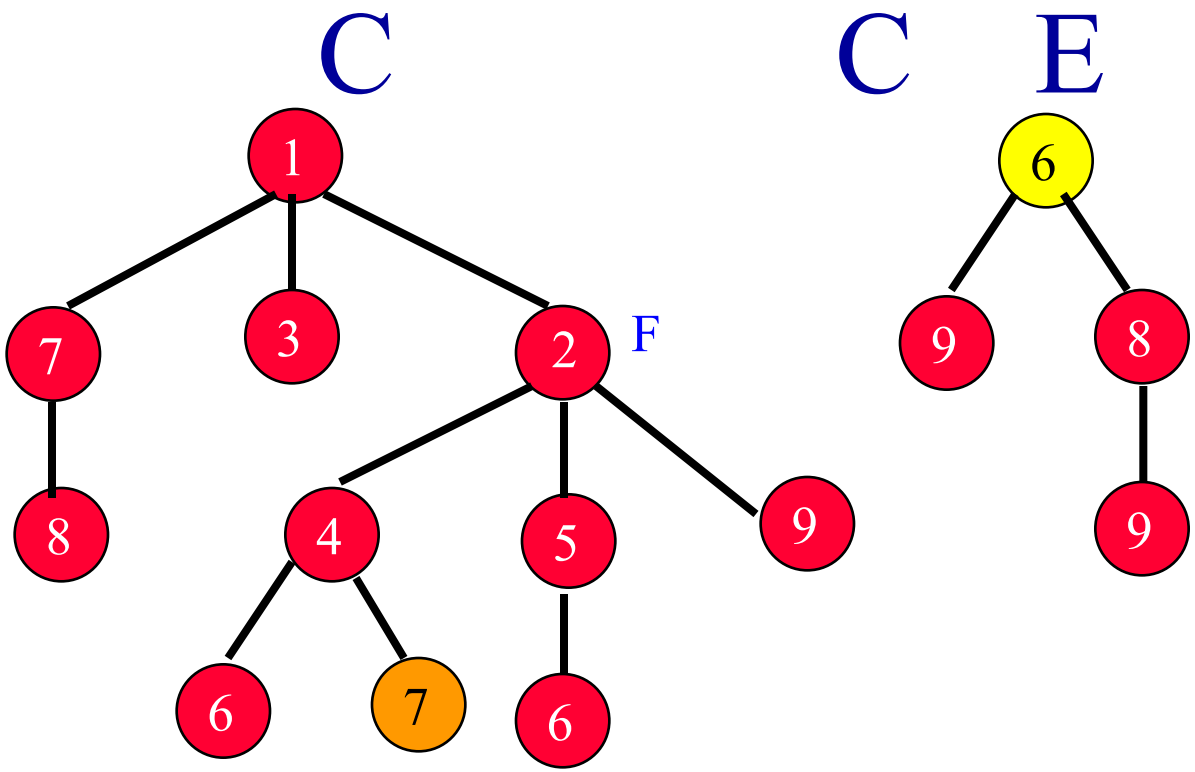
C C = .

F , C C = .

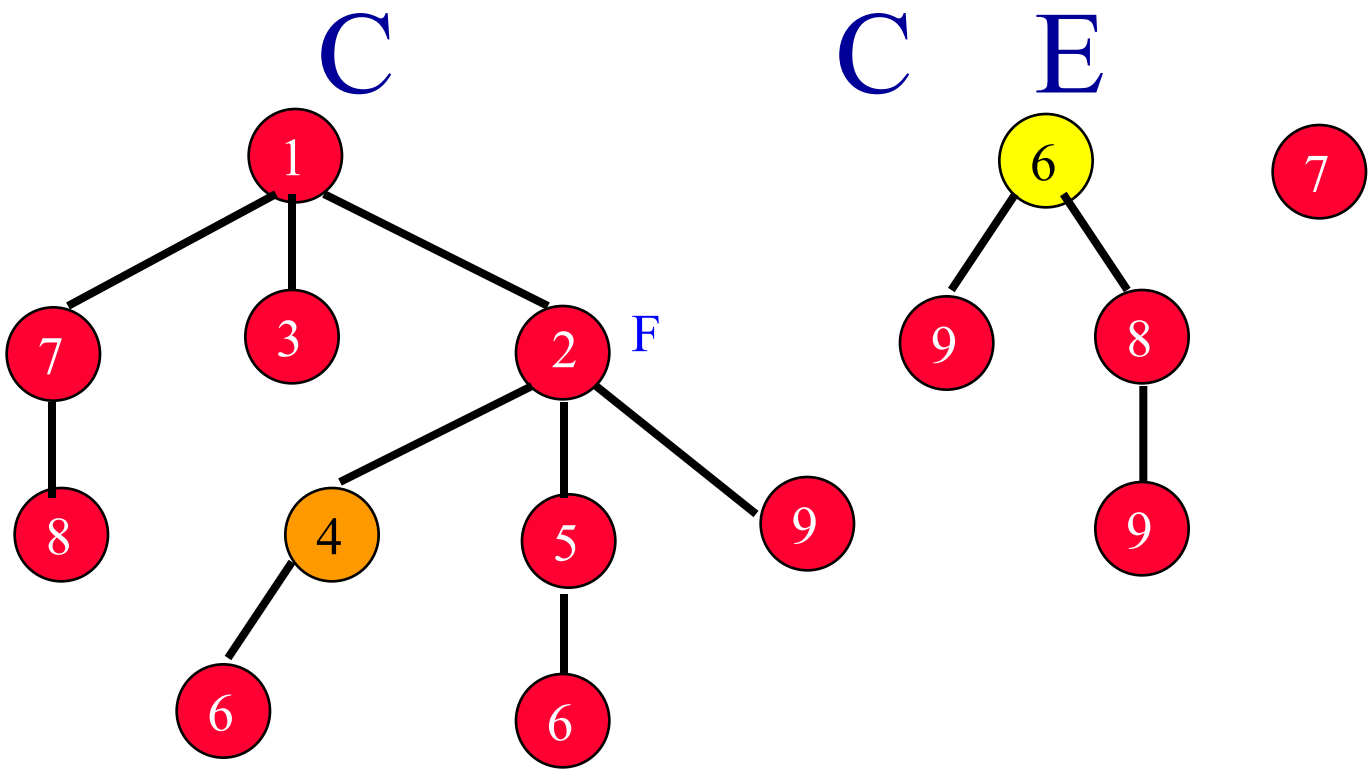
C C E

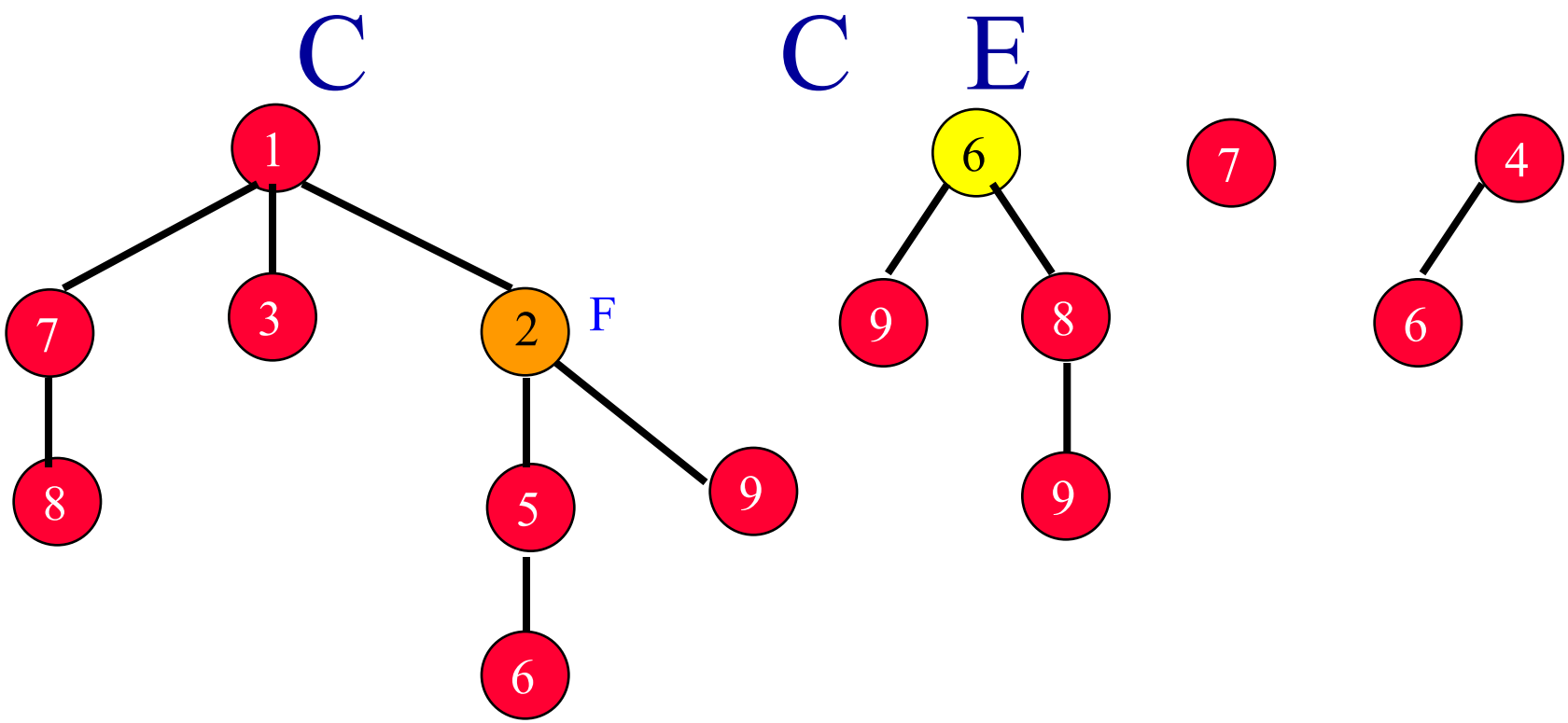


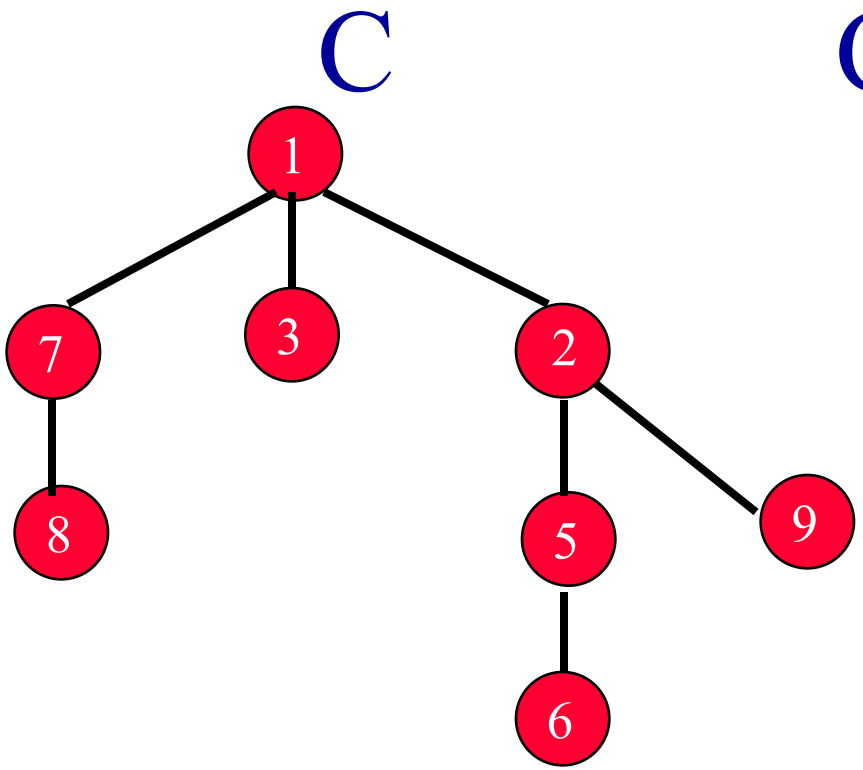
D 2.

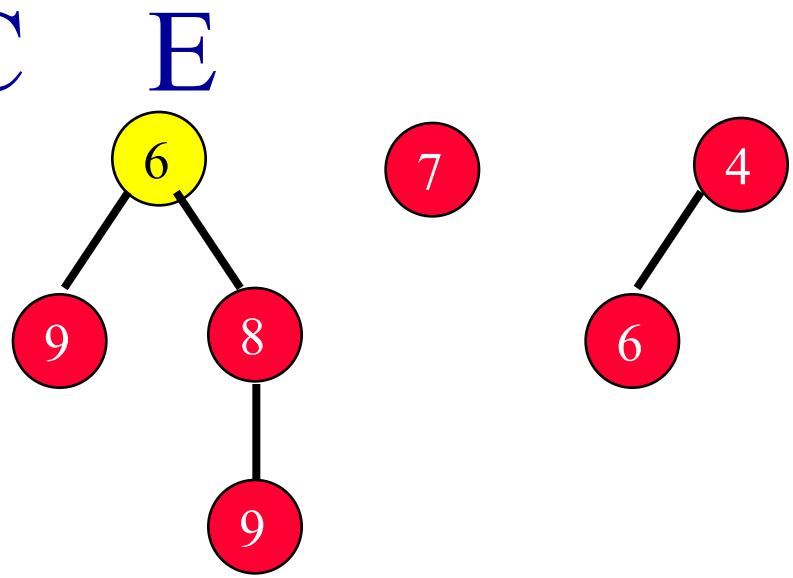

C
1
7
3
2
F
8
4
5
9
6
7
6

C E
6
9
8
9


C
C
E
1
7
3
2
F
8
4
5
9
6
6
6
9
8
9
7


C
C
E
1
7
3
2
F
8
5
9
6
6
9
8
9
7
4
6





A

O( ) = O( ).