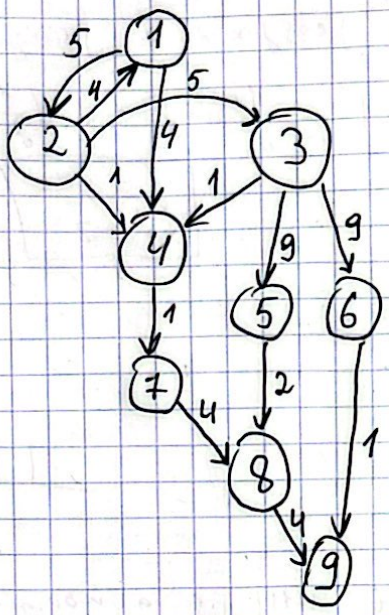
N1. Graphs and their terminology

Student ID: k12149099

d6=1, d7=9, d8=9

d2=2, d3=1, d4=4



Questions:

a) Yes

b) Yes

c) 4

d) 3

e) 9

f) cyclic

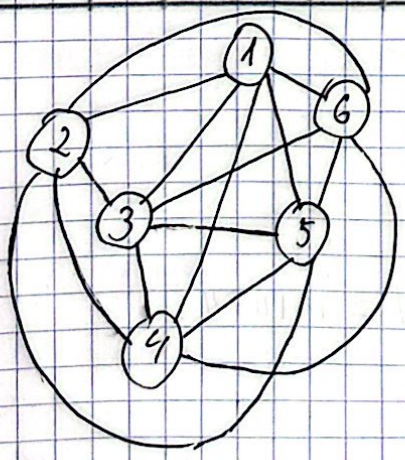
g) no loops

h) weakly connected

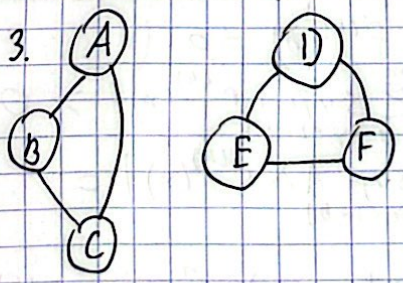
i) not a tree

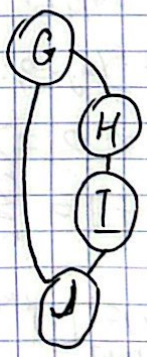
from/to	1	2	3	4	5	6	7	8	9
1		5		4					
2	4		5	1					
3				d6=1	d7=9	d8=9			
4							1		
5								2	
6									1
7								4	
8									4
9									

2.

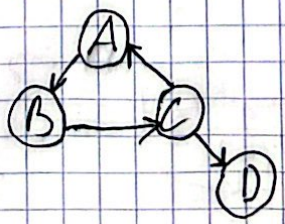


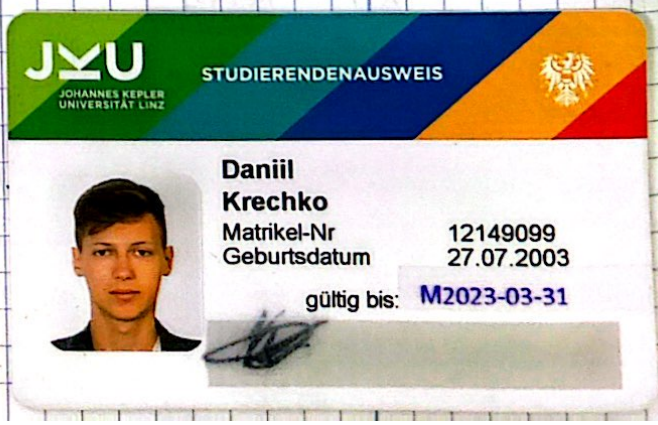
3.



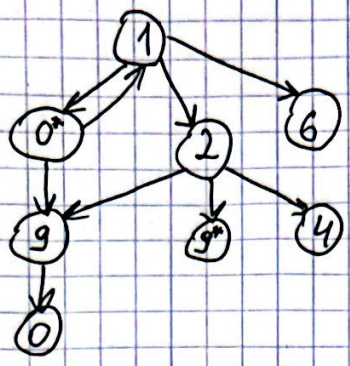


4.





5.



1 - [0*, 2, 6] - 0* - [1]

0* - [1, 9] - 9 - [1, 0*]

9 - [0] - 0 - [1, 0*, 9]

0 - [ ] - 9(up) - [1, 0*, 9, 0]

9 - [0] - 0*(up) - [1, 0*, 9, 0]

0* - [1, 9] - 1(up) - [1, 0*, 9, 0]

1 - [0*, 2, 6] - 2 - [1, 0*, 9, 0]

2 - [4, 9, 9*] - 4 - [1, 0*, 9, 0, 2]

4 - [ ] - 2(up) - [1, 0*, 9, 0, 2, 4]

2 - [4, 9, 9*] - 9* - [1, 0*, 9, 0, 2, 4]

9* - [ ] - 2(up) - [1, 0*, 9, 0, 2, 4, 9*]

2 - [4, 9, 9*] - 1(up) - [1, 0*, 9, 0, 2, 4, 9*]

1 - [0*, 2, 6] - 6 - [1, 0*, 9, 0, 2, 4, 9*]

6 - [ ] - 1(up) - [1, 0*, 9, 0, 2, 4, 9*, 6]

1 - [0*, 2, 6] - end - [1, 0*, 9, 0, 2, 4, 9*, 6]