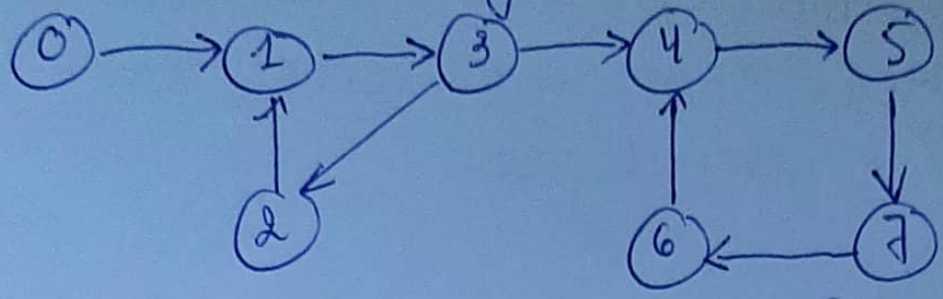
2 1120052 - Lê Ram Huy Quỳnh Như

3. 1/



1/

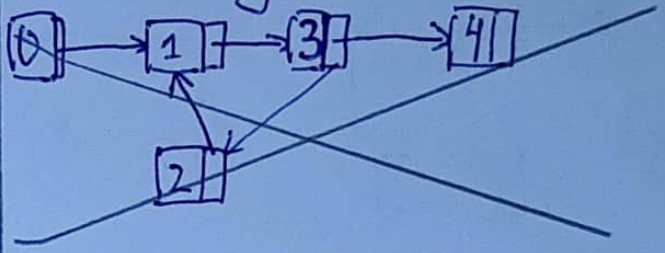
a/ Adjacency-matrix

	0	1	2	3	4	5	6	7
0	0	1	0	0	0	0	0	0
1	0	0	0	1	0	0	0	0
2	0	1	0	0	0	0	0	0
3	0	0	1	0	1	0	0	0
4	0	0	0	0	0	1	0	0
5	0	0	0	0	0	0	0	1
6	0	0	0	0	1	0	0	0
7	0	0	0	0	0	0	1	0

b/ Edge list

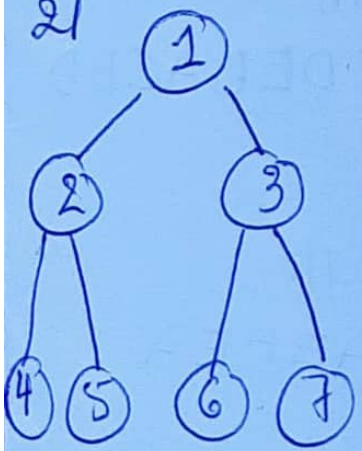
[0, 1], [1, 3], [2, 1], [3, 2],
[3, 4], [4, 5], [5, 7], [6, 4], [7, 6]

c/ Adjacency-list



0 → 1 , 1 → 3, 2 → 1
3 → 2 → 4, 4 → 5, 5 → 7,
6 → 4, 7 → 6

2/



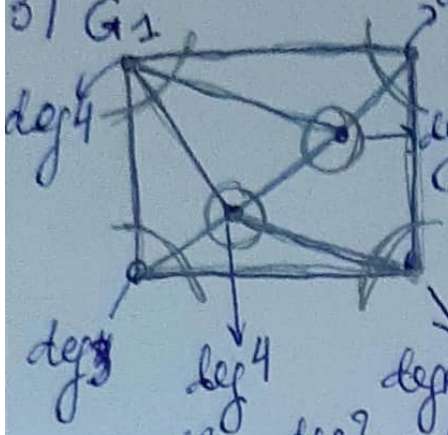
Edge-list

1 → 2 → 3
2 → 4 → 5
3 → 6 → 7
4 → NULL
5 → NULL
6 → NULL
7 → NULL

Adjacency-matrix

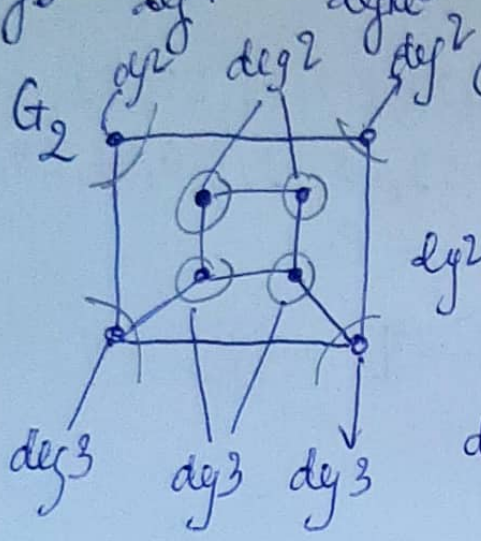
	1	2	3	4	5	6	7
1	0	1	1	0	0	0	0
2	0	0	0	1	1	0	0
3	0	0	0	0	0	1	1
4	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0

3/ G_1

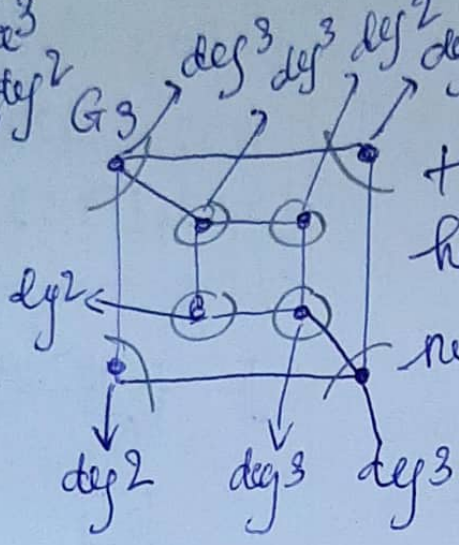


this graph does not have elenean cycle as not all the vertices has even degree.

G_2

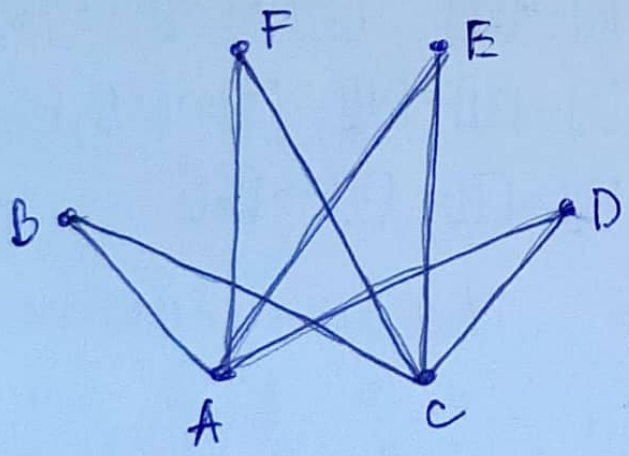


G_3

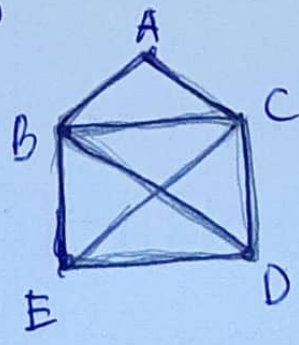


these two graph don't have Eulerian cycle as not all the vertices has even degree

G_4

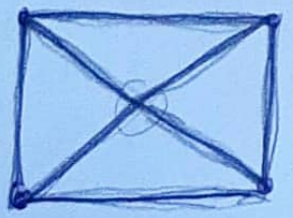


Euler circuit
ABCDAECFA

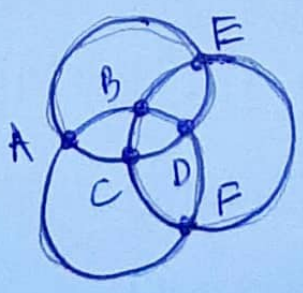


Path
ECDEBACBD

4/



can not be drawn without lifting the pencil from paper and without repeating exactly one.



Path
DFAEFEA