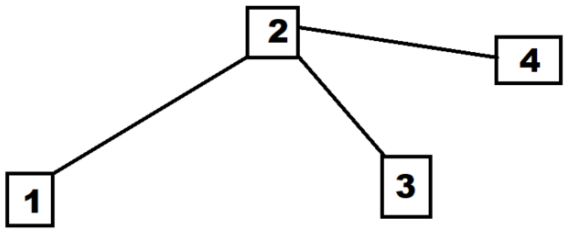
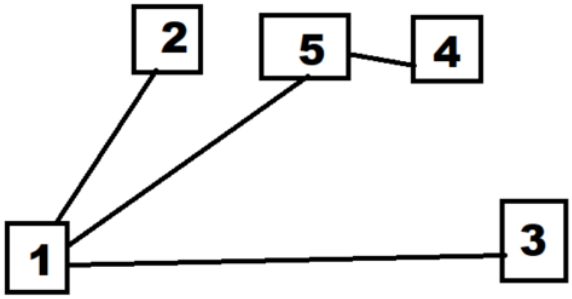
1)



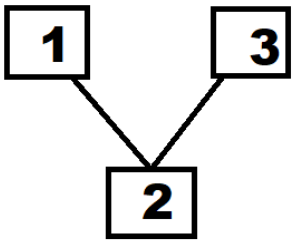
0	1	0	0
1	0	1	1
0	1	0	0
0	1	0	0



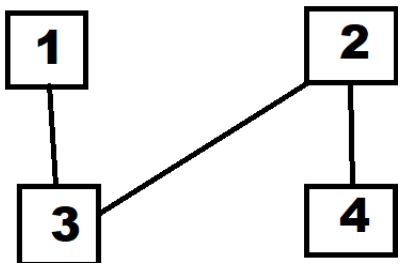
0	1	1	0	1
1	0	0	0	0
1	0	0	0	0
0	0	0	0	1
1	0	0	1	0

This cannot be a Eulerian Cycle or a Eulerian path as you cannot visit each path once and each city, and you cannot return back to your own original vertex

2)



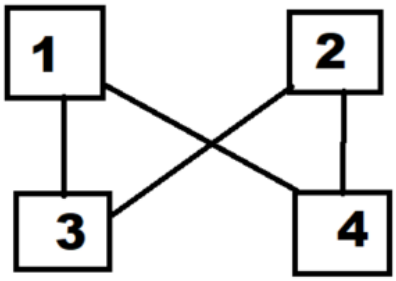
0	1	0
1	0	1
0	1	0



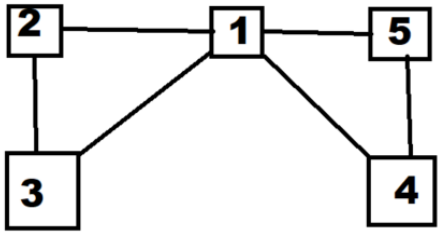
0	0	1	0
0	0	1	1
1	1	0	0
0	1	0	0

This cannot be a Eulerian cycle as you do not end back at the original vertex where you start.

3)



0	0	1	1
0	0	1	1
1	1	0	0
1	1	0	0



0	1	1	1	1
1	0	1	0	0
1	1	0	0	0
1	0	0	0	1
1	0	0	1	0

4)

Each vertex must have even edges as there must be a way to enter and leave each point as you need to reach back to the original point, if you have an odd amount, it is impossible to return to the starting point

5)

Without having an odd amount of edges when starting and ending, and must have an even amount for the vertexes in between as it must enter and leave, if it was odd, you would be required to travel through a path already travelled.