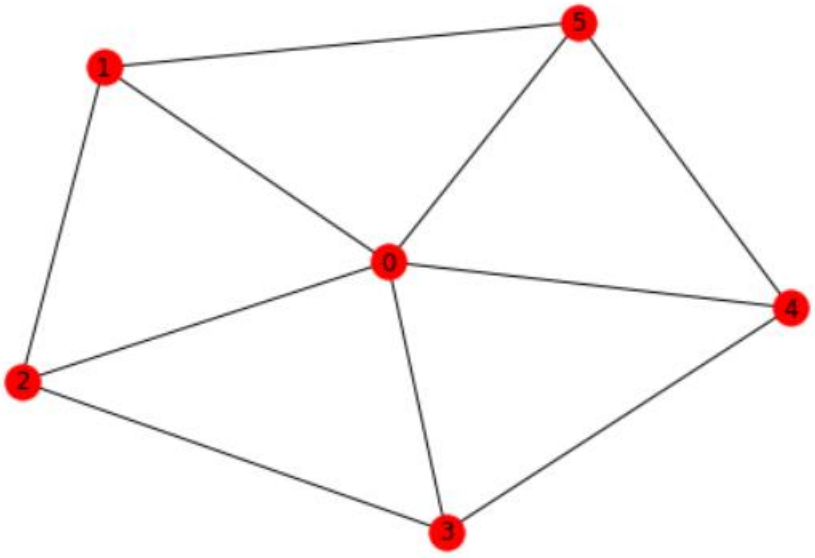
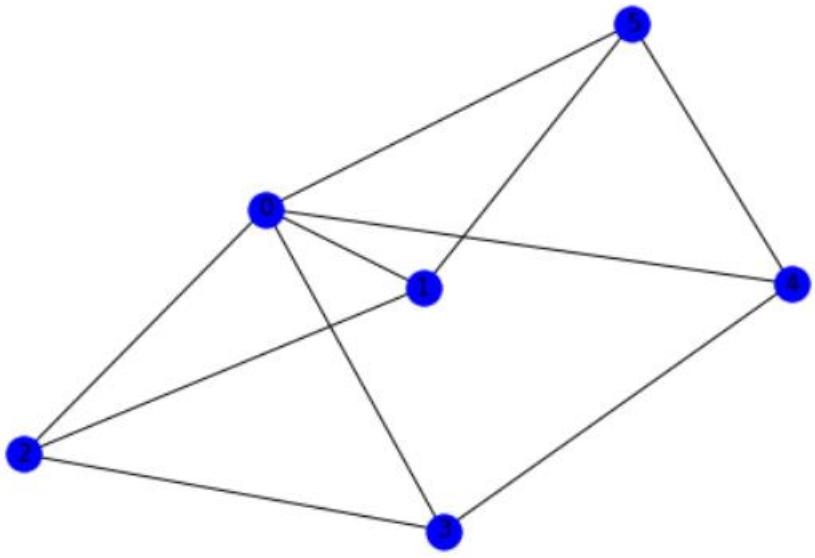
We visualize a graph with 10 edges as follows:

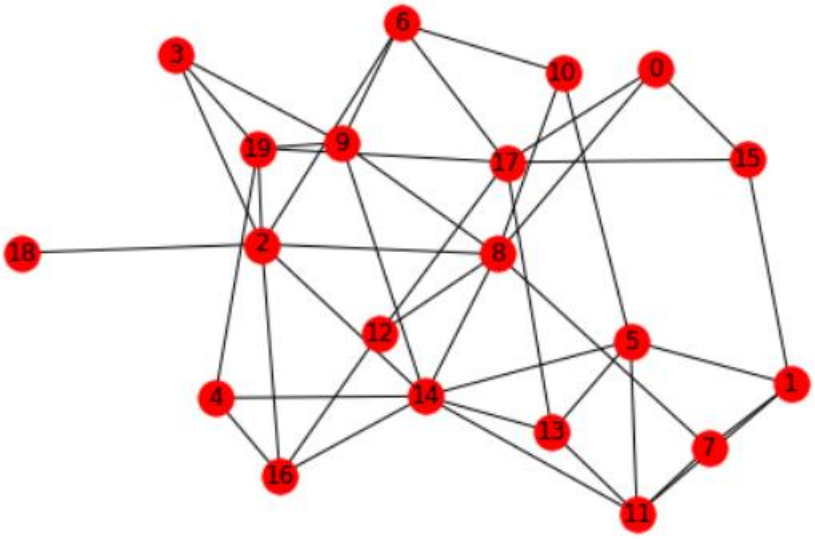
edgelist=[(0,1),(0,2),(0,3),(0,4),(0,5),(1,2),(2,3),(4,5),(3,4),(1,5)]



We choose the random node along the all nodes and then calculate the pay-off according to the neighbors with infection rate 0.2. Below is infected nodes base on the infection rate:



In the second try, this time we visualize a random graph (erdos_renyi_graph ()) with 20 nodes as follows:



We do the same calculation on random graph and we achieve the below result: