Q1) The shortest path was determined manually and was found to be:
0 – 1 – 3 – 4 – 7 – 8

Then, the shortest path was run using python and the results corrospond to the same shortest path above as figure 1 shows.

A	B	C	D	E	F	G
agent_id	from_nod	to_node	shortest_	shortest_path_node_seq		
1	0	1	6	0;1;		
2	0	2	2	0;2;		
3	1	2	5	1;2;		
4	1	3	2	1;3;		
5	2	3	8	2;3;		
6	2	4	10	2;4;		
7	2	7	16	2;4;7;		
8	3	5	5	3;4;5;		
9	3	4	3	3;4;		
10	4	5	2	4;5;		
11	4	7	6	4;7;		
12	5	6	5	5;6;		
13	5	7	7	5;7;		
14	6	8	4	6;8;		
15	7	8	3	7;8;		
16	0	8	20	0;1;3;4;7;8;		

Figure 1: The output of the shortest path using python (Q1)

Q3) A network was created and the shortest path was determined to be as:

0 – 1 – 5 – 6

	A	B	C	D	E	F
	agent_id	from_nod	to_node	shortest_	shortest_path_node_	
	1	0	1	3	0;1;	
	2	0	2	2	0;2;	
	3	1	3	8	1;3;	
	4	1	5	7	1;5;	
	5	2	3	5	2;3;	
	6	2	4	9	2;3;4;	
	7	3	4	4	3;4;	
	8	3	5	9	3;5;	
	9	3	4	4	3;4;	
	10	4	6	6	4;6;	
	11	5	6	5	5;6;	
	12	0	6	15	0;1;5;6;	

Figure 2: The output of the shortest path using python (Q3)