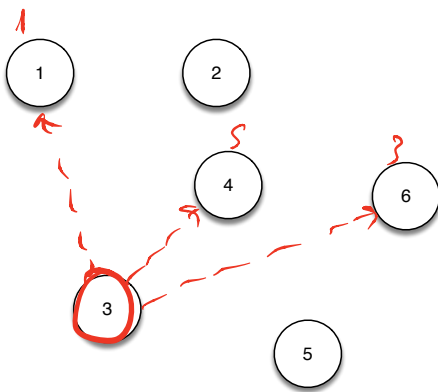
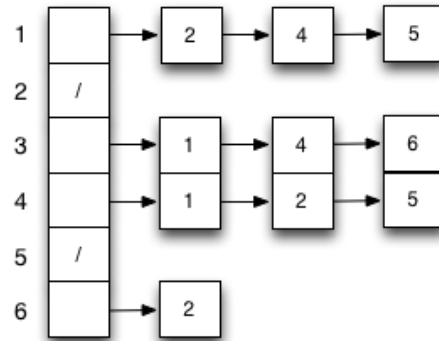
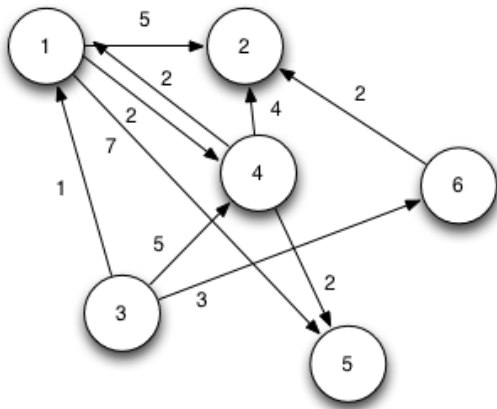
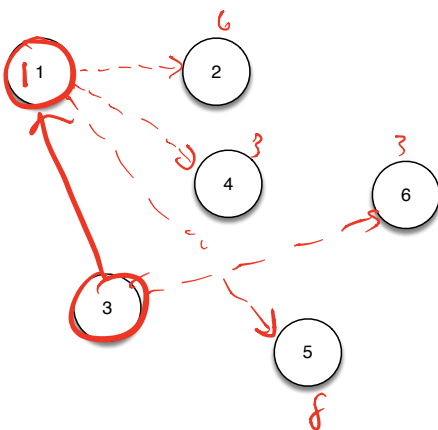


Show the execution of Dijkstra's algorithm using *vertex 3* as the source. Fill in the chart for the final d and π values, indicate the edges used in the shortest paths, and list the order that the vertices were *removed* from the queue during the execution of the algorithm.



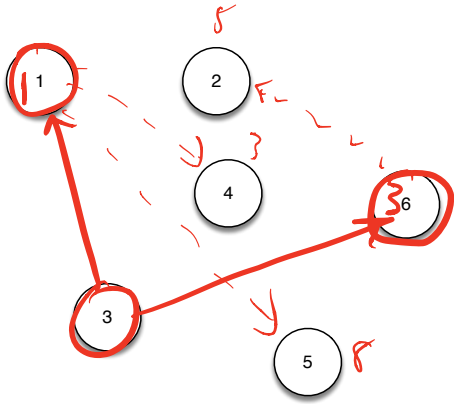
key	u	pi
1	1	3
3	6	3
5	4	3
∞	2	/
∞	5	/

1 → 1



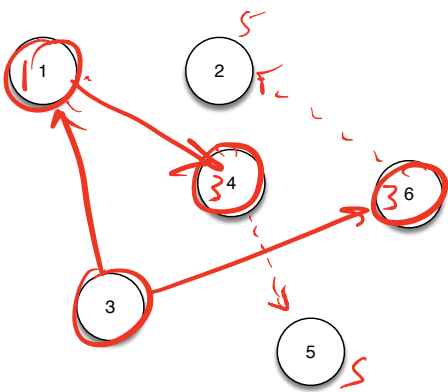
key	u	pi
3	6	3
3	4	1
6	2	1
8	5	1

6 → 3



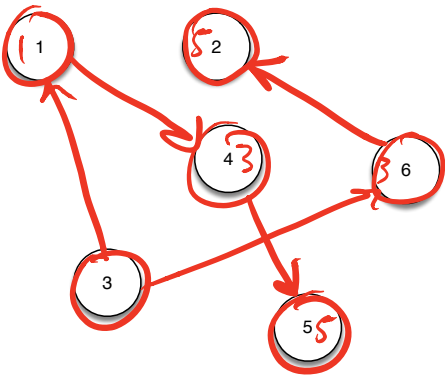
key	u	pi
3	4	1
5	2	6
8	5	1

4 → 3



key	u	pi
5	2	6
5	5	4

2 → 5



key	u	pi
5	5	4

5 → 5