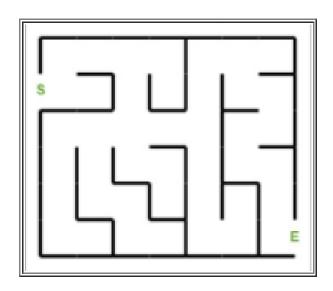
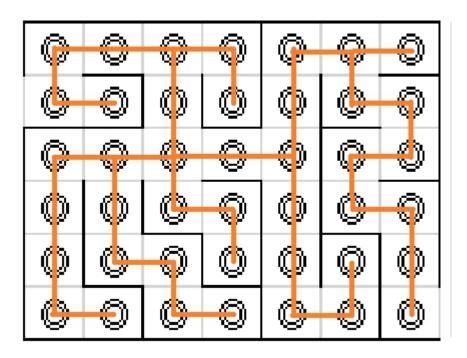
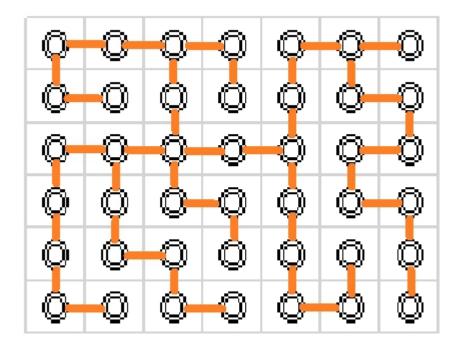
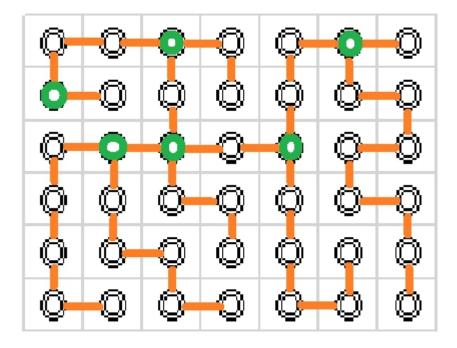
Q 25. Use <u>Prim's Minimum Spanning Tree</u> algorithm and <u>Kruskal's Minimum Spanning Tree</u> algorithm to find the <u>shortest path</u> of a maze.

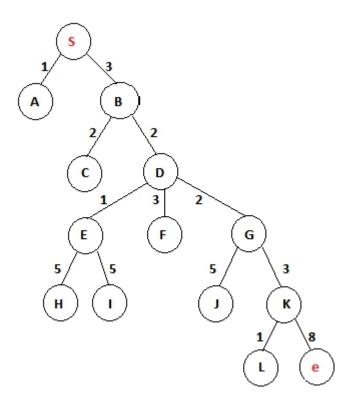
 Step 1: Similar to the <u>previous question</u> of finding the shortest path of the a maze. But instead of using Dijkstra's Algorithm, you will use <u>Minimum Spanning Tree</u> Algorithm.



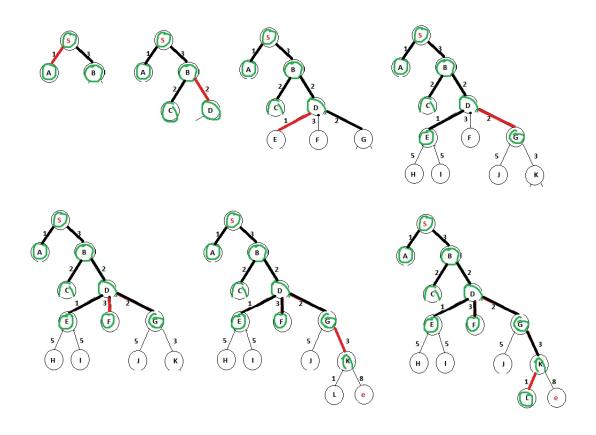


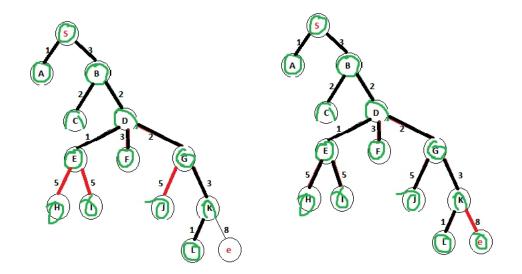






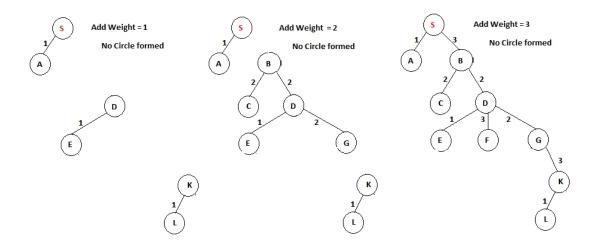
Prim's Minimum Spanning Tree

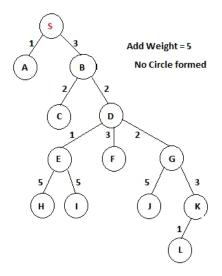


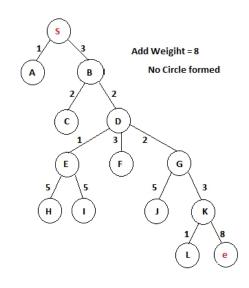


Kruskal's Minimum Spanning Tree

Weight	Src	Dest
1	S	Α
1	D	Е
1	K	L
2	В	С
2	В	D
2	D	G
3	S	В
3	D	F
3	G	К
5	E	Н
5	E	I
5	G	J
8	K	е







- Step 2: Comparing the performance of these two algorithm in solving this question by
 Big-O comparison

Prim's Minimum Spanning Tree

$$O((v + E)logV)$$

Kruskal's Minimum Spanning Tree

$$O(E * log V)$$

o Step 3: <u>Update your portofolio about the Maze project</u>