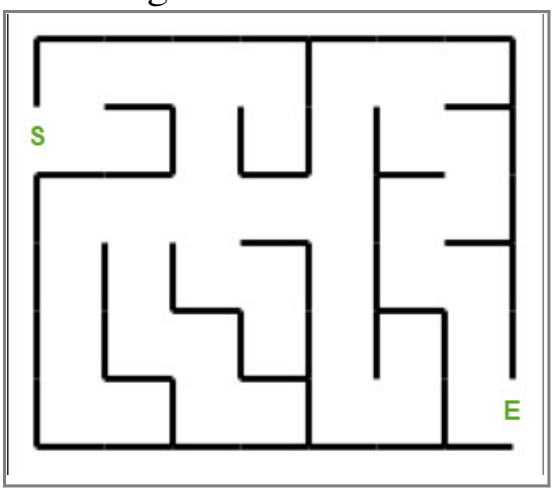
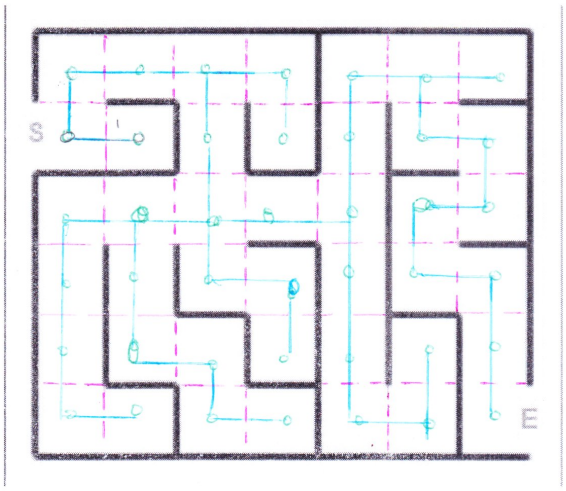
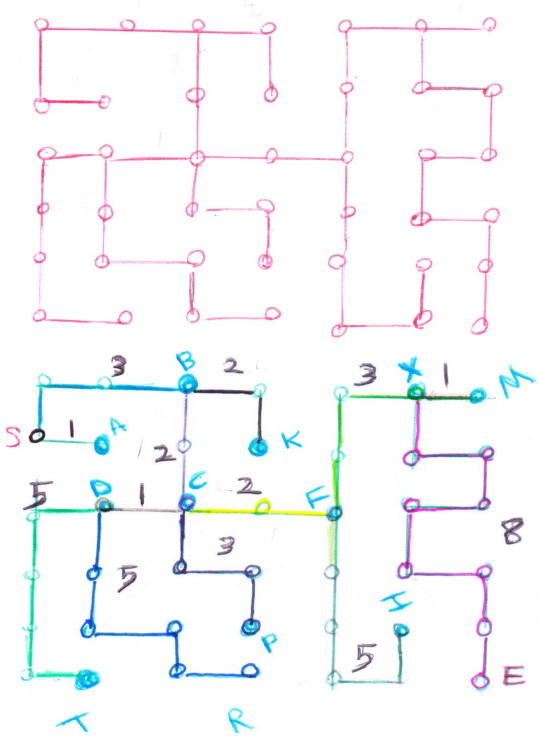
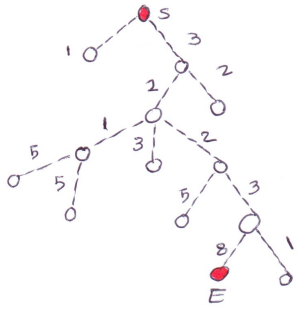
Question 6:Use Dijkstra's Algorithm to find the shortest path of the the following maze

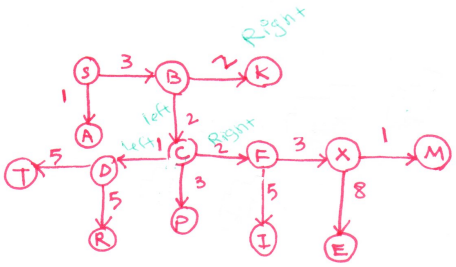


- References
  - Maze
  - Shortest Path


S
E


S
A
B
C
D
F
K
M
X
H
E
T
R
P


S
E


S
B
K
A
C
F
X
M
T
D
R
P
I
E
left
right
left
right

Vertex(accumulated path)	Initial	Step1 S	Step 2 (S,B)	Step 3 (S,B,C)	Step 4 (S,B,C,D)	Step 5 (S,B,C,D, F)	Step 6 (S,B,C,D, F,X)	Step 7 (S,B,C,D, F,X,E)
	Next Step S	Next Step B	Next Step C	Next Step D	Next Step F	Next Step X	Next Step E	
S	0	0	0	0	0	0	0	0
B	In	3	3	3	3	3	4	4
A	In	1	1	1	1	1	1	1
C	In	In	5	5	5	5	5	5
K	In	In	5	5	5	5	5	5
P	In	In	In	8	8	8	8	8
D	In	in	In	6	6	6	6	6
F	In	In	In	7	7	7	7	7
R	In	In	In	In	11	11	11	11
T	In	In	In	In	11	11	11	11
I	In	In	In	In	In	12	12	12
X	In	In	In	In	In	10	10	10
M	In	In	In	In	In	In	11	11
E	**In**	**In**	**In**	**In**	**In**	**In**	**18**	**18**

- V: the current visiting node
- V: the next node to visit
- ~~V~~: this node has been visited

Stop if the destination node E is reached
you will find the minimum distance of **E** from **S** is **18**. The path is **S>B>C>D>F>X>E**