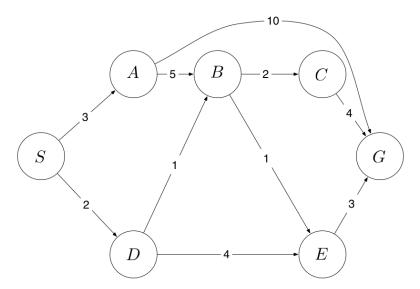
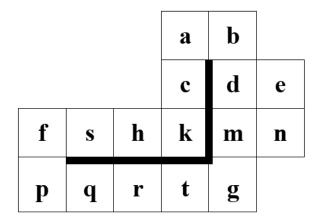
## **Question 1:**

Find the path from S to G using the UCS algorithm for the graph below. Please show the transformation of f and the path found



## **Question 2**

Given the maze as shown below. Bold lines represent impassable wall.

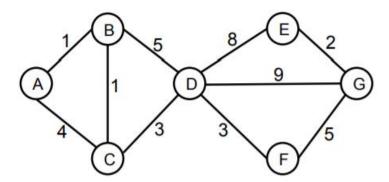


Find your way from s to g with the search strategies as below. Show the expanded order of each cells according to format  $\langle b_1, b_2, ..., b_n \rangle$ , with  $b_i$  is the expanded cell.

## a. BFS

b. DFS with state checks along the way to avoid loops. The expansion order is Right -> Bottom -> Left -> Top

## **Question 3:**



Find the way from A to G. Show the transformation steps of fringe (stack, queue).

- a. BFS
- b. DSF
- c. UCS