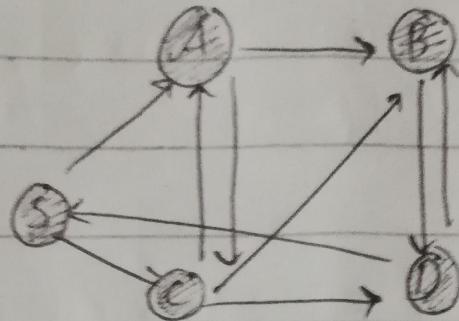


Quiz

Q#02

9.5/10

(a)



DFS:

pop: C S D B A

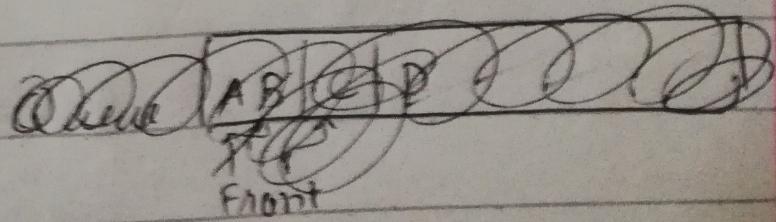
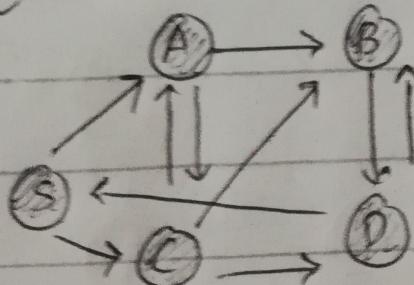
C'
S
D
B
A

Stack

Output:
ABDSC

BFS:

4 Marks



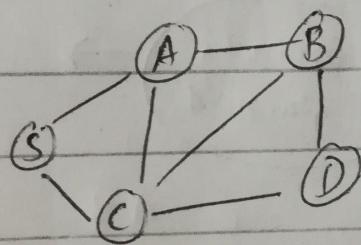
Print: A B C D

Queue: A B C D S

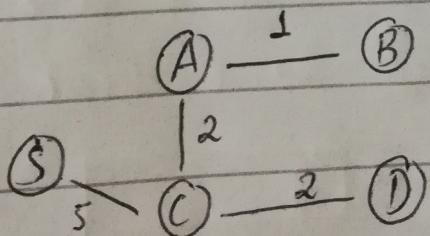
Output: A B C D S

Q #02

(b)



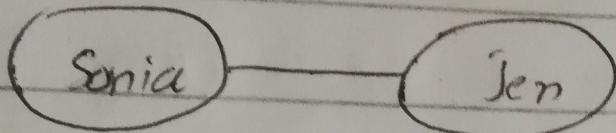
Minimum Spanning Tree:



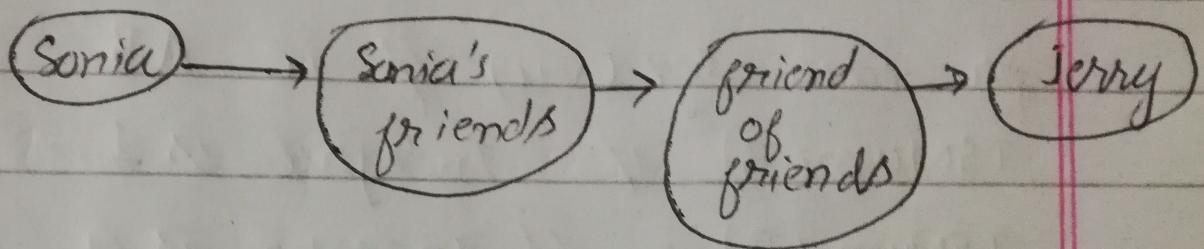
Q#03

2 Marks

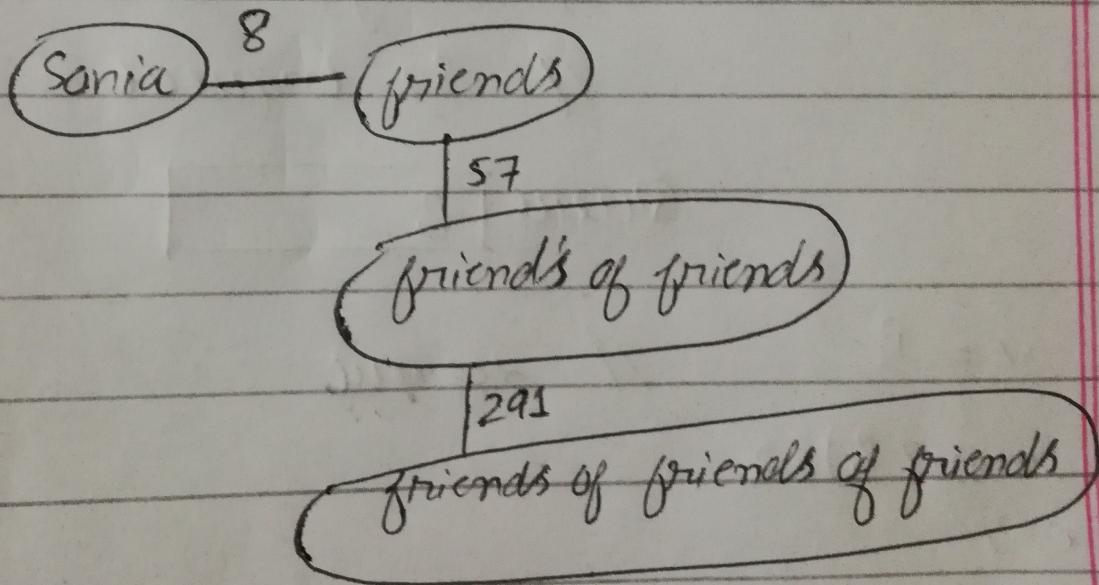
(a)



(b)



(c)



[Q#01]

TSNum(A) // Indegree is 0
// so Enqueue A

Queue A

i=1

while
// Queue is not empty

v = A

num(A) = 1;

i=2

for each edge (vu) // ie AB

TSNum(B) // Indegree is 1

TSNum(B) -- // Indegree is 0

// so Enqueue

Queue B

v = B // dequeue

num(B) = 2

i=3

for each edge (vu) // ie BC

TSNum(C) // Indegree is 2

TSNum(C) -- // Indegree is 1

$\text{TSKnum}(C) = 2$

This Algo is different because it uses the indegree to process.

If indegree is 0 then it Enqueue calls Enqueue function. whereas

in class we use stack with adj list.

3.5 Marks