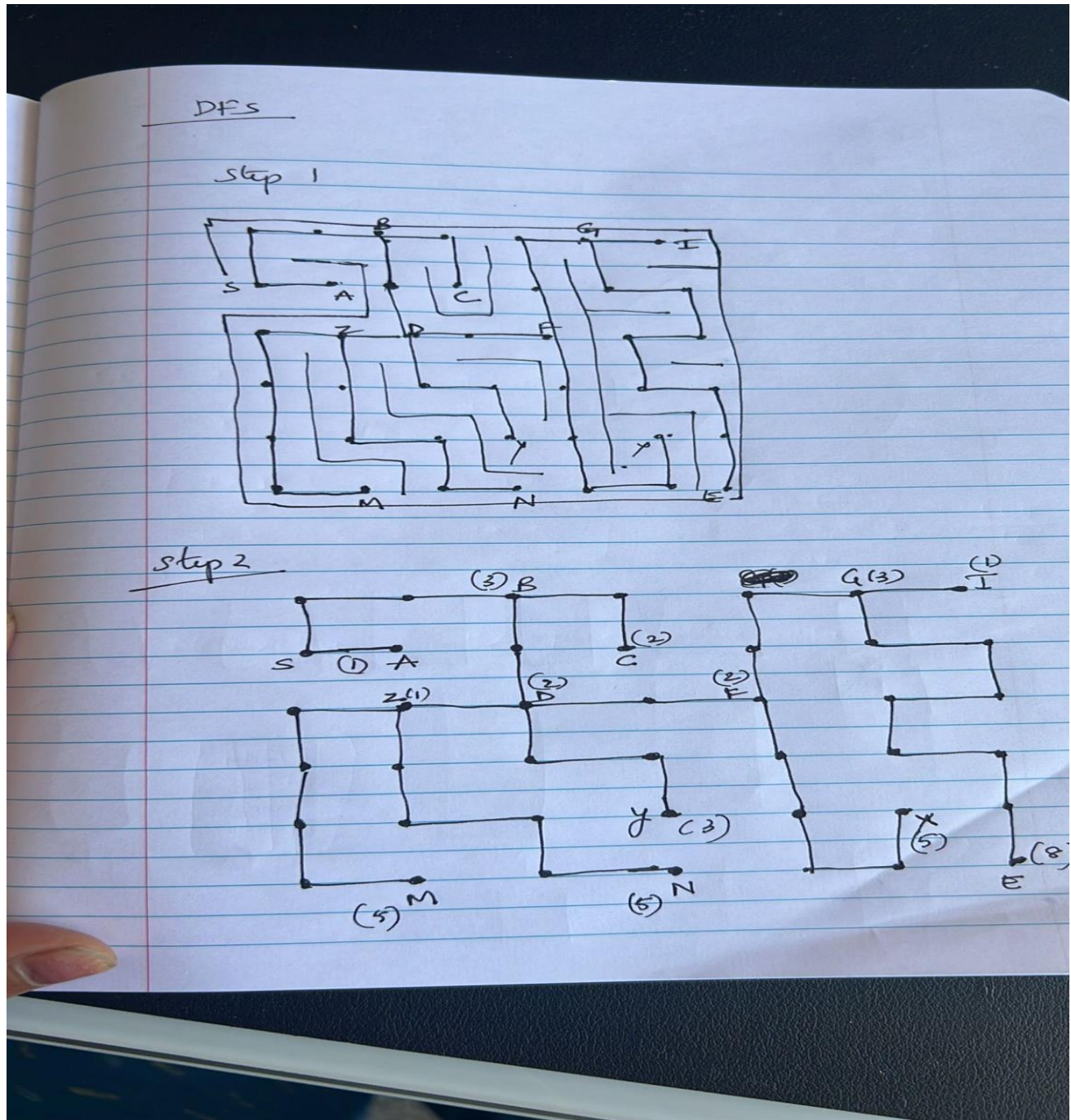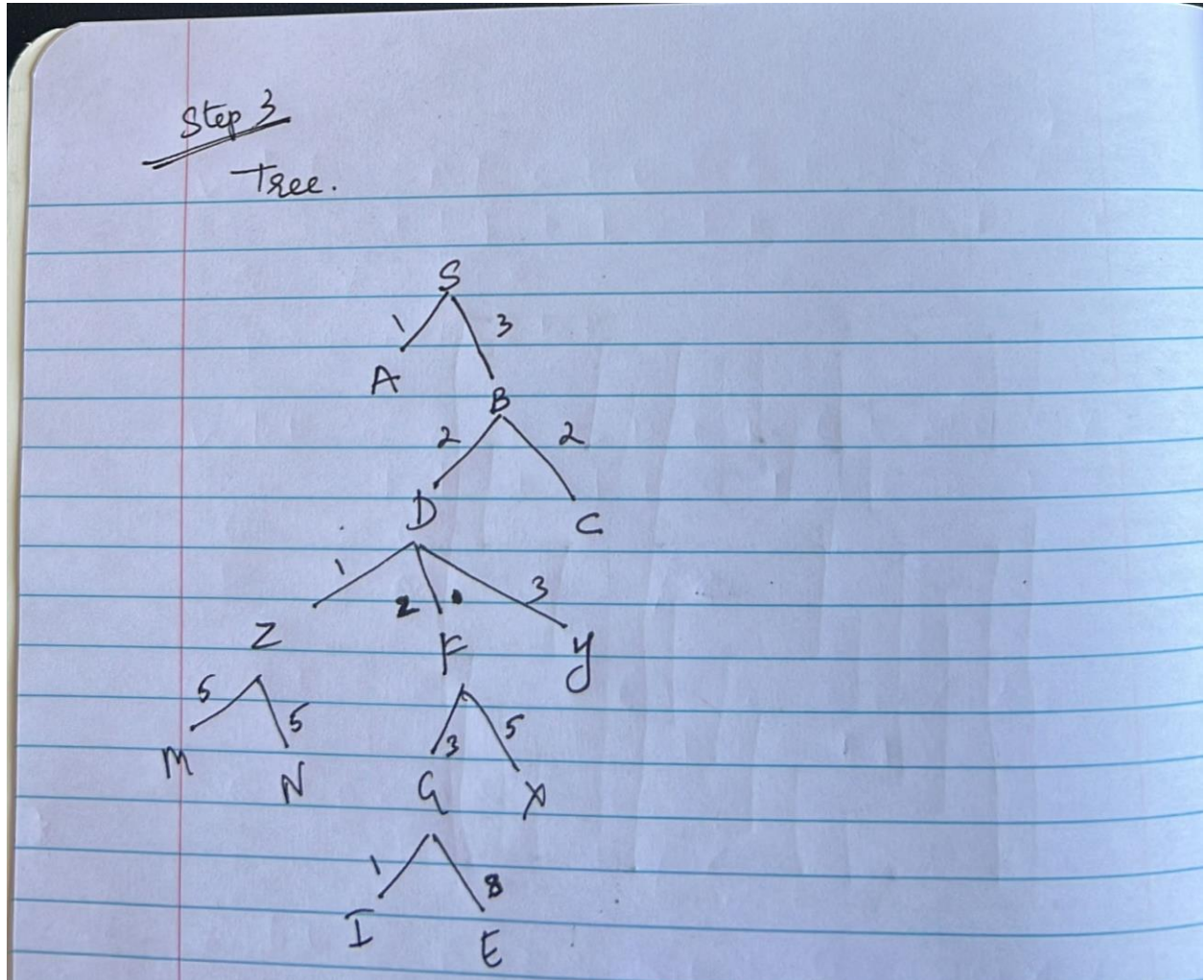# Week 11: Homework 2: Breadth-First Traversal: The Maze

Q4 => Conduct Breadth First Traversal (BFT) on the following maze

Week 11: Homework 2: Breadth-First Traversal: The Maze

<u>Step 3</u>

Tree.

Week 11: Homework 2: Breadth-First Traversal: The Maze

Step 4 BFS.

```
            1  0   0  0  0  0  0  0  0  1  0  0  0  0  0
Visited  S  A  B  C  D  E  F  G  I  M  N  X  Y  Z
Q : S
P :

Visited  S  A  B  C  D  E  F  G  I  M  N  X  Y  Z
         1  1  1  0  0  0  0  0  0  0  0  0  0  0
Q : A B
P : S

Visited  S  A  B  C  D  E  F  G  I  M  N  X  Y  Z
         1  1  1  0  0  0  0  0  0  0  0  0  0  0
Q : B.
P : S A

Visited  S  A  B  C  D  E  F  G  I  M  N  X  Y  Z
         1  1  1  1  1  0  0  0  0  0  0  0  0  0
Q : C D
P : S A B

Visited  S  A  B  C  D  E  F  G  I  M  N  X  Y  Z
         1  1  1  1  1  0  0  0  0  0  0  0  0  0
Q : D
P : S A B C

Visited  S  A  B  C  D  E  F  G  I  M  N  X  Y  Z
         1  1  1  1  1  0  1  0  0  0  0  0  1  1
Q : F Y Z
P : S A B C D
```

Week 11: Homework 2: Breadth-First Traversal: The Maze

visited: S A B C D E F G I M N X Y Z
         1 1 1 1 1 1 0 1 1 0 0 0 1 1 1
Q: X Y Z G X
P: S A B C D F

visited S A B C D E F G I M N X Y Z
         1 1 1 1 1 1 0 1 1 0 0 0 1 1 1
Q: Z G X
P: S A B C D F Y

visited S A B C D E F G I M N X Y Z
         1 1 1 1 1 1 0 1 1 0 1 1 1 1 1
Q: G X M N
P: S A B C D F Y Z

visited S A B C D E F G I M N X Y Z
         1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Q: X M N I E
P: S A B C D F Y Z G

visited S A B C D E F G I M N X Y Z
         1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Q: M N I E
P: S A B C D F Y Z G X

visited S A B C D E F G I M N X Y Z
         1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Q: N I E
P: S A B C D F Y Z G X M

Week 11: Homework 2: Breadth-First Traversal: The Maze

visited   S A B C D E F G I M N X Y Z
         l l l l l l l l l l l l l l

Q   I E
P   S A B C D F Y Z G X M N

visited   S A B C D E F G I M N X Y Z.
         l l l l l l l l l l l l l l l

Q   E
P   S A B C D F Y Z G X M N I

visited   S A B C D E F G I M N X Y Z.
         l l l l l l l l l l l l l l

Q   _____
P :   S A B G D F Y Z G X M I N E

Week 11: Homework 2: Breadth-First Traversal: The Maze

Step1 : Traced the path in Maze

Step 2 : The actual path I got

Step 3: Maze converted into Tree

Step 4: Breadth First Traversal