2K20/CO/072 Ankit Kumar

Q1.

```
int maxElement(struct Queue *Q) {
    int max = dequeue(Q);
    int temp = max;
    while (size(Q) > 0) {
        temp = dequeue(Q);
        if (temp > max)
            max = temp;
    }
    enqueue(Q, temp);
    return max;
}
```

Q2.

```
void mirrorTree(struct TreeNode *root)
{
    if(root == NULL)
        return;
    mirrorTree(root->left);
    mirrorTree(root->right);
    struct TreeNode *temp = root->left;
    root->left = root->right;
    root->right = temp;
}
```

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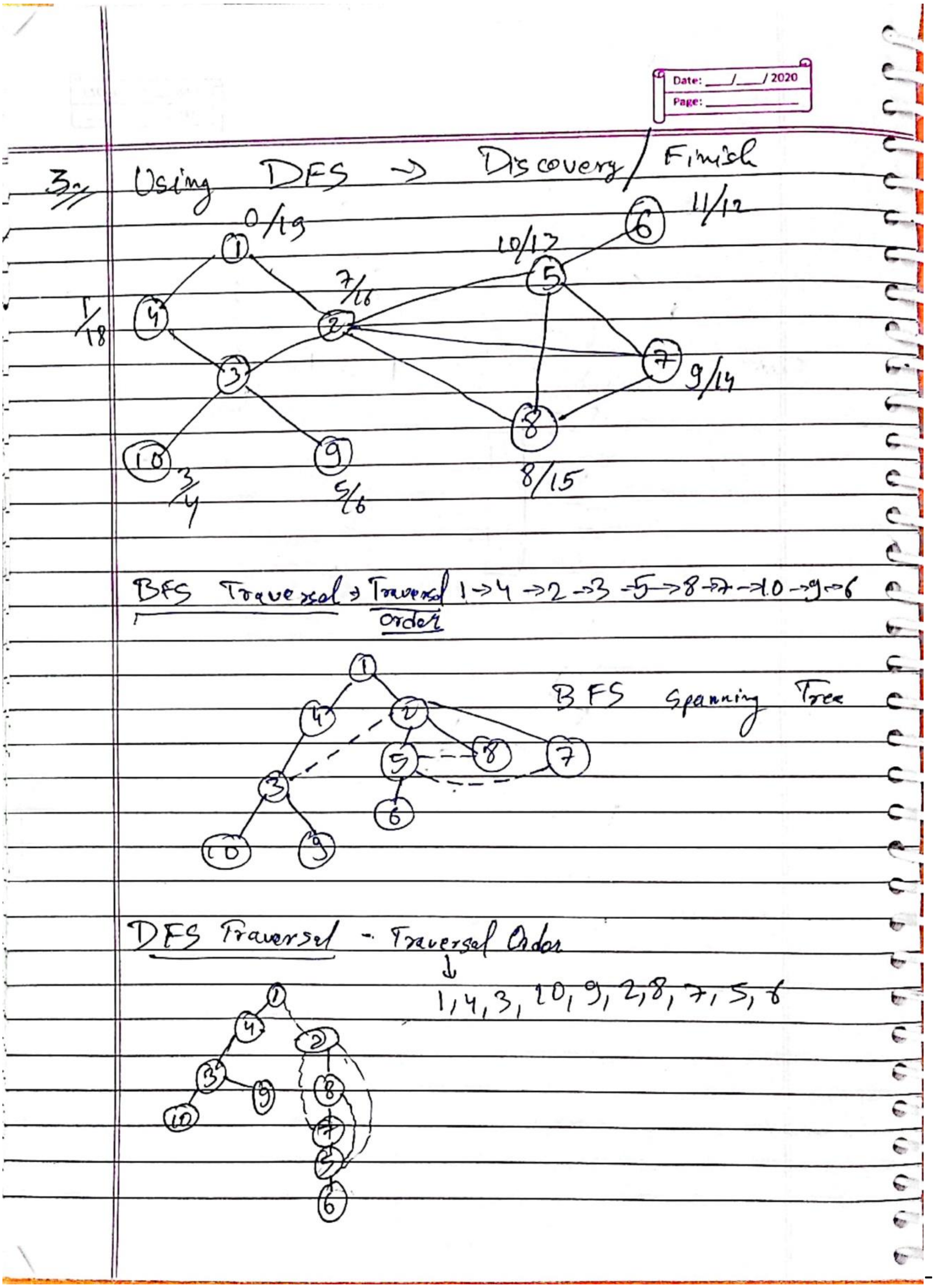
Q3.



3.// Using DFS → Discovery / Finish

BFS Traversal → Traversal order 1→4→2→3→5→8→7→10→9→6

BFS Spanning Tree

DFS Traversal - Traversal Order
↓
1, 4, 3, 10, 9, 2, 8, 7, 5, 6

Q4.

```
IsTree():
  mark u as visited;
  for all vertex v which are adjacent with u:
    if v is visited:
      if isCycle(v, visited, u) return true
      else if v ≠ parent return true;
  done
  return false
```