Practise tasks: Mar 29

DSA

- 1. Given a binary tree, write an iterative and recursive solution to traverse the tree using **inorder traversal**.
- 2. Given a binary tree, write an iterative and recursive solution to traverse the tree using **preorder traversal**.
- 3. Given a binary tree, write an iterative and recursive solution to traverse the tree using **postorder traversal**.

JS

1. Given two sorted arrays of integers, find a maximum sum path involving elements of both arrays whose sum is maximum. We can start from either array, but we can switch between arrays only through its common elements.

```
Input:

X = { 3, 6, 7, 8, 10, 12, 15, 18, 100 }
Y = { 1, 2, 3, 5, 7, 9, 10, 11, 15, 16, 18, 25, 50 }

The maximum sum path is:

1 -> 2 -> 3 -> 6 -> 7 -> 9 -> 10 -> 12 -> 15 -> 16 -> 18 -> 100

The maximum sum is 199
```

- 2. Write a JavaScript program to check whether there is at least one element which occurs in two given sorted arrays of integers.
- 3. Write a JavaScript program to check whether a given number is in a given range.

- 4. Write a JavaScript program to find the number of elements which presents in both of the given arrays.
- 5. Write a JavaScript program to compare two objects to determine if the first one contains equivalent property values to the second one.