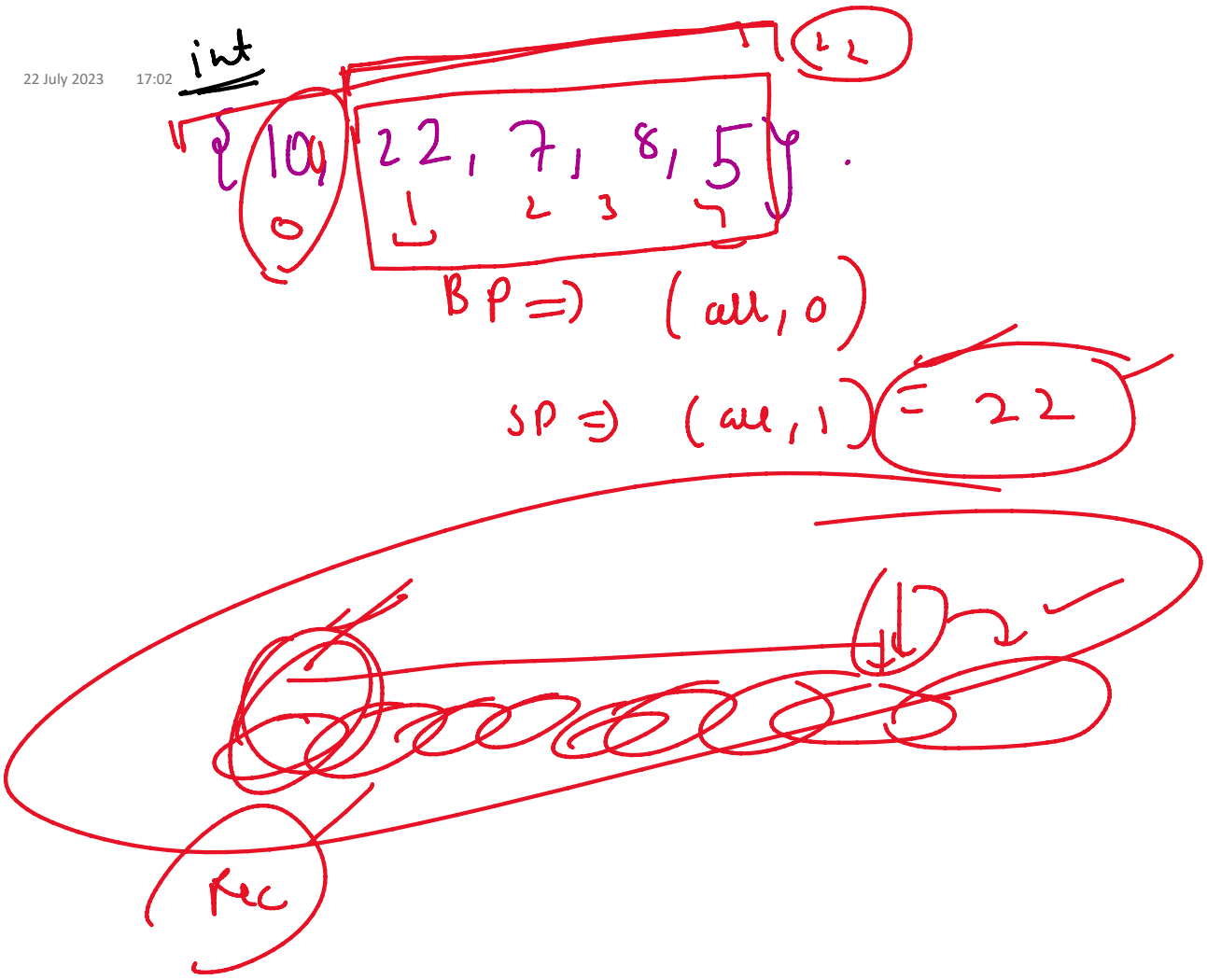
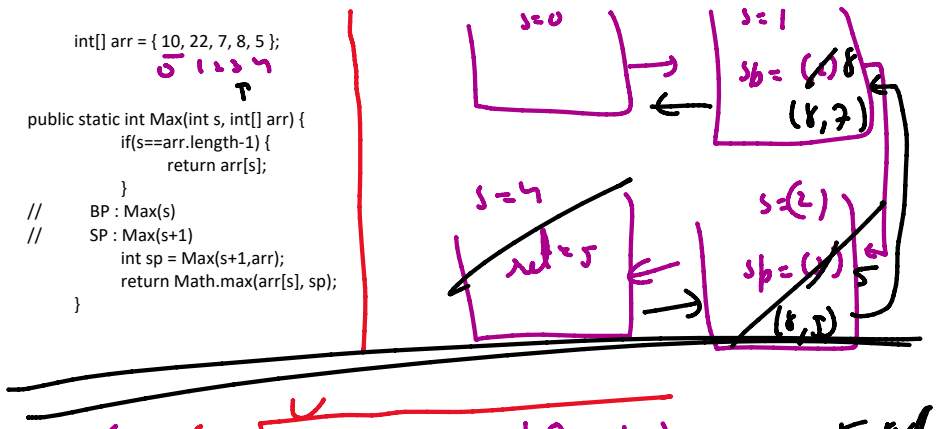
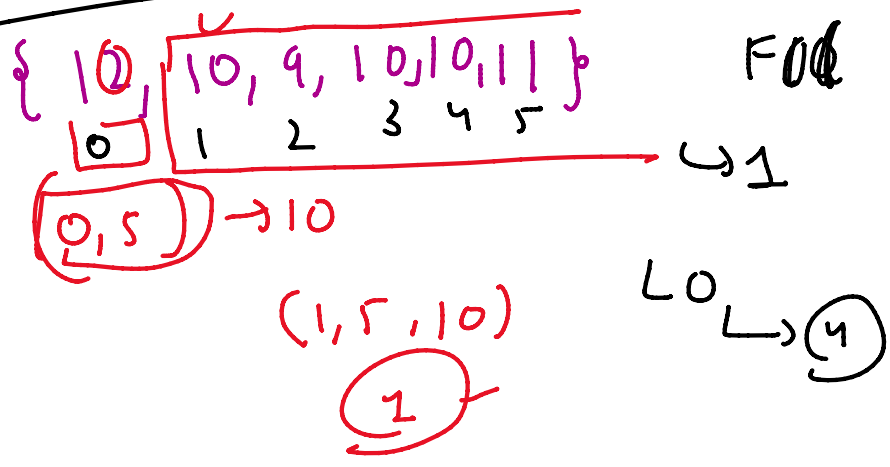
22 July 2023 17:02

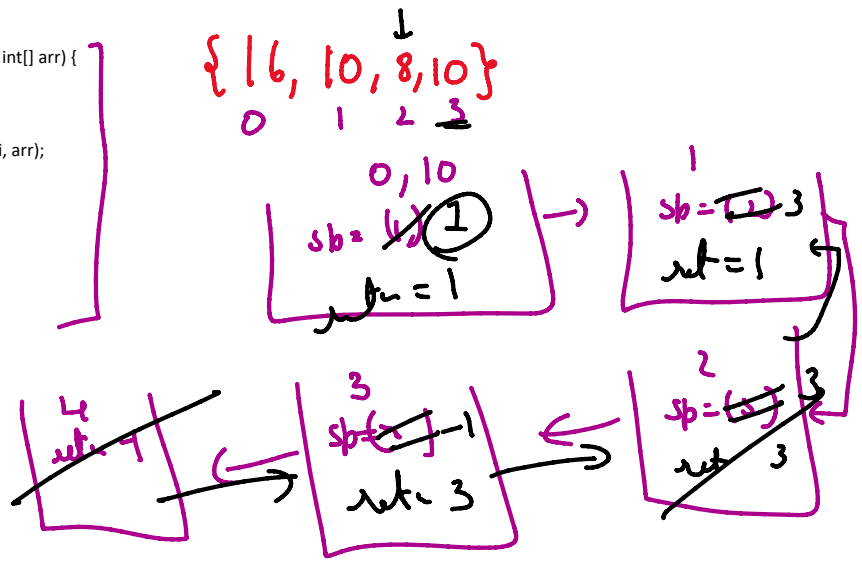


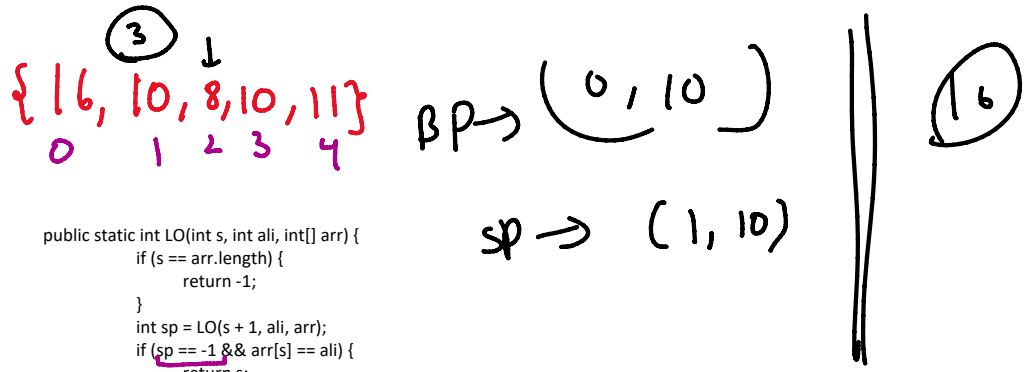

```
int[] arr = { 10, 22, 7, 8, 5 };

public static int Max(int s, int[] arr) {
        if(s==arr.length-1) {
            return arr[s];
        }
//      BP : Max(s)
//      SP : Max(s+1)
        int sp = Max(s+1,arr);
        return Math.max(arr[s], sp);
    }
```



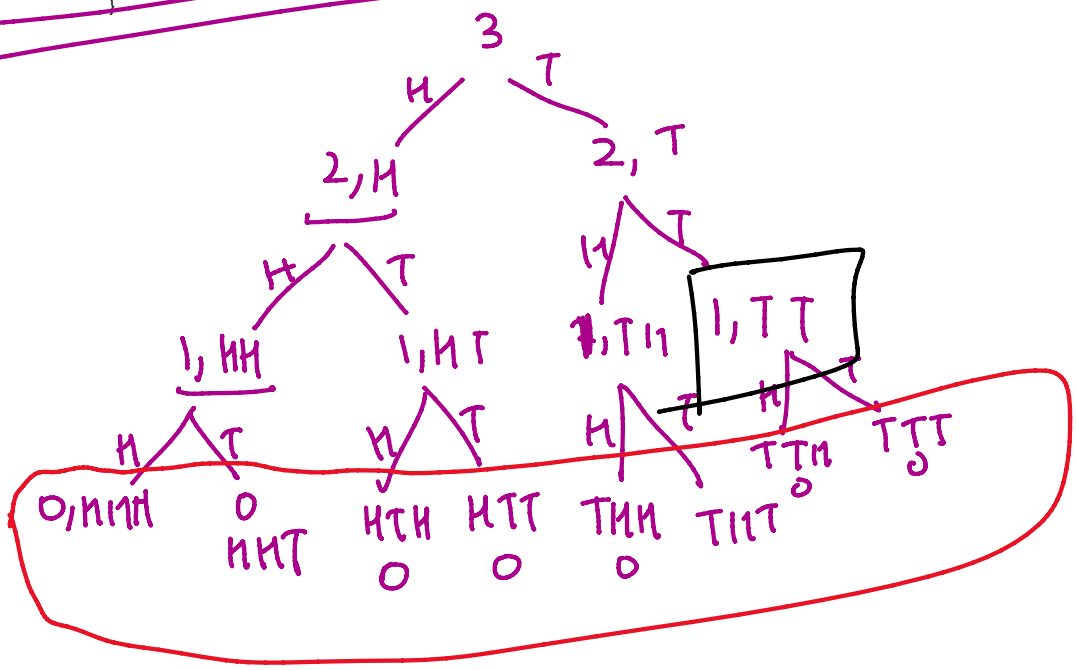


```
public static int FO(int s, int ali, int[] arr) {
        if(s==arr.length) {
            return -1;
        }
        int sp = FO(s + 1, ali, arr);
        if (arr[s] == ali) {
            return s;
        } else {
            return sp;
        }
    }
```

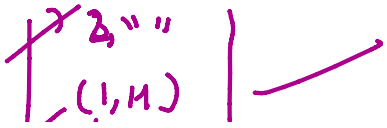




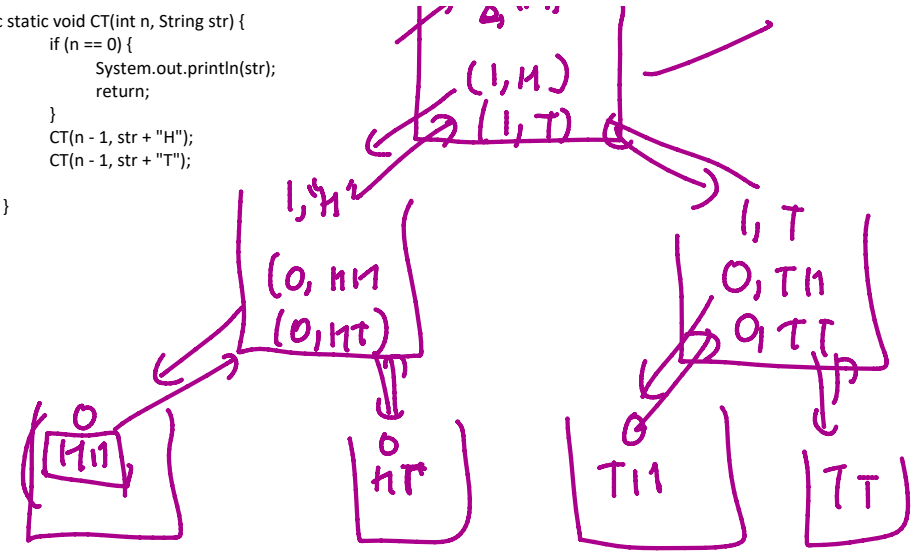

```
public static int LO(int s, int ali, int[] arr) {
        if (s == arr.length) {
            return -1;
        }
        int sp = LO(s + 1, ali, arr);
        if (sp == -1 && arr[s] == ali) {
            return s;
        } else {
            return sp;
        }
    }
```




```
public static void CT(int n, String str) {
        if (n == 0) {
            System.out.println(str);
            return;
```

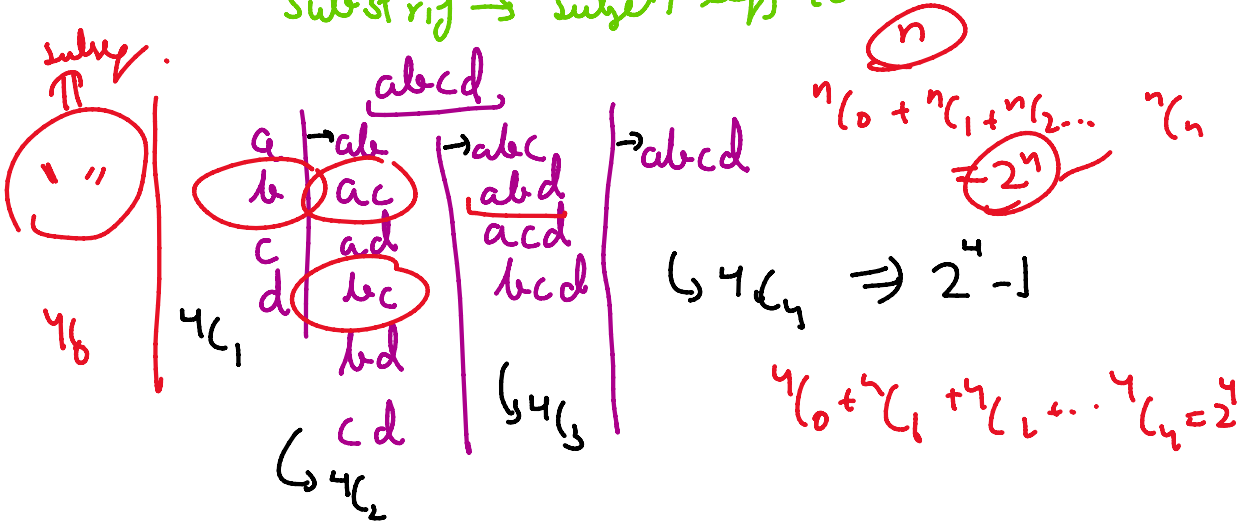


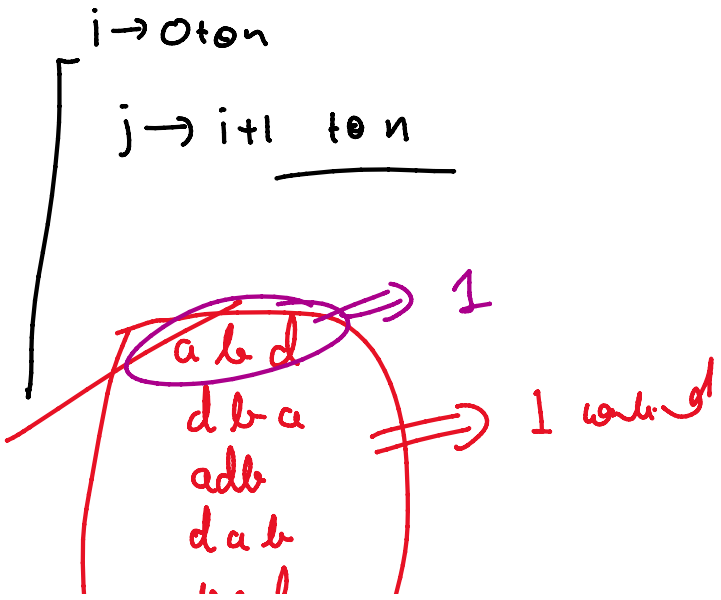
```
public static void CT(int n, String str) {
        if (n == 0) {
            System.out.println(str);
            return;
        }
        CT(n - 1, str + "H");
        CT(n - 1, str + "T");

}
```



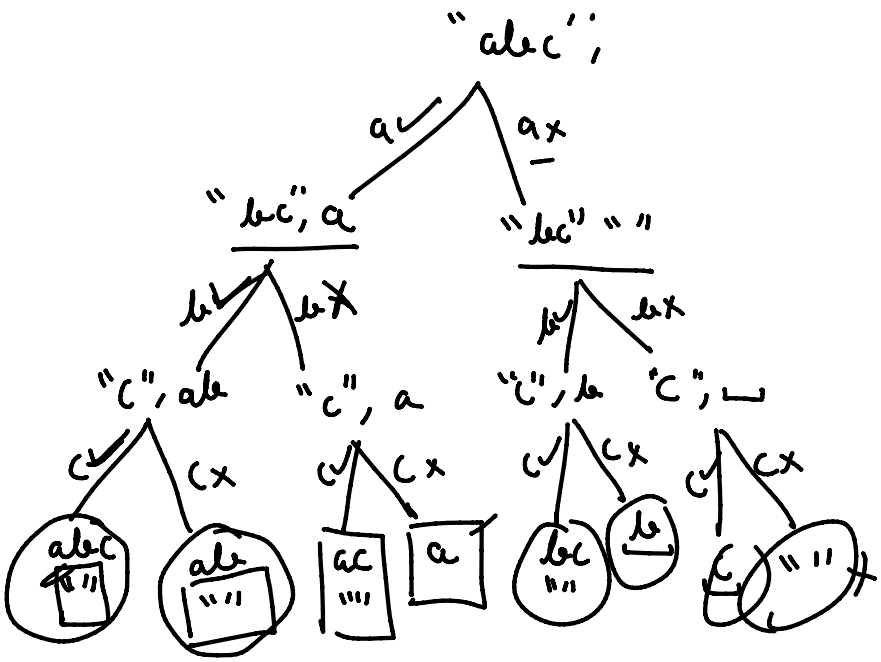
Subsequence → subset, seq.

Substring → subset, seq. (cont.





dab
bad
bda



```
public static void Subseq(String str, String team) {
        if(str.isEmpty()) {
            System.out.println(team);
            return;
        }
//          BP : str = "abcd" , ""
//          SP : str = "bcd"
        char ch = str.charAt(0);//a
        String remain = str.substring(1); //bcd
        Subseq(remain, team+ch);
        Subseq(remain, team);

    }
```