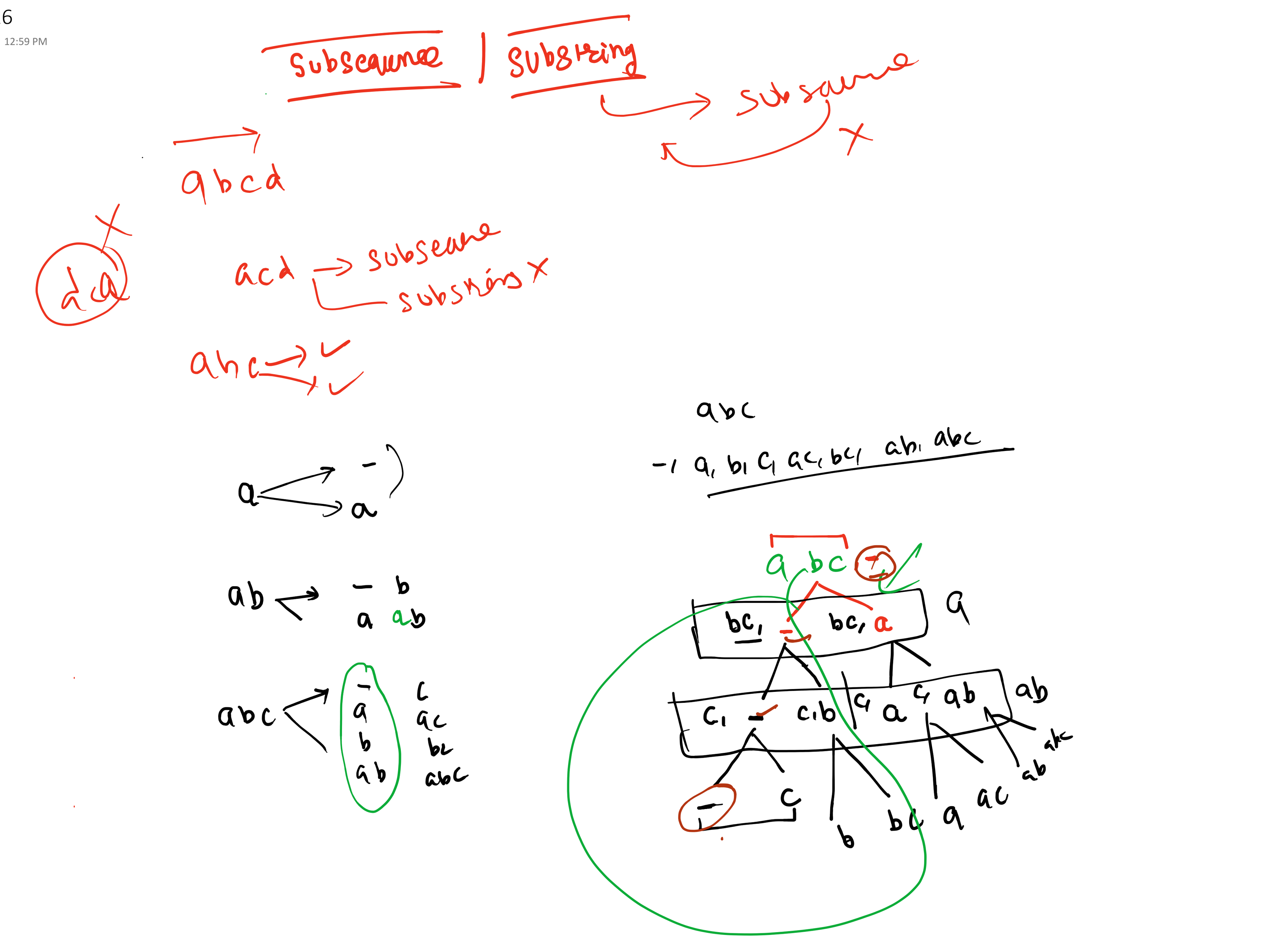
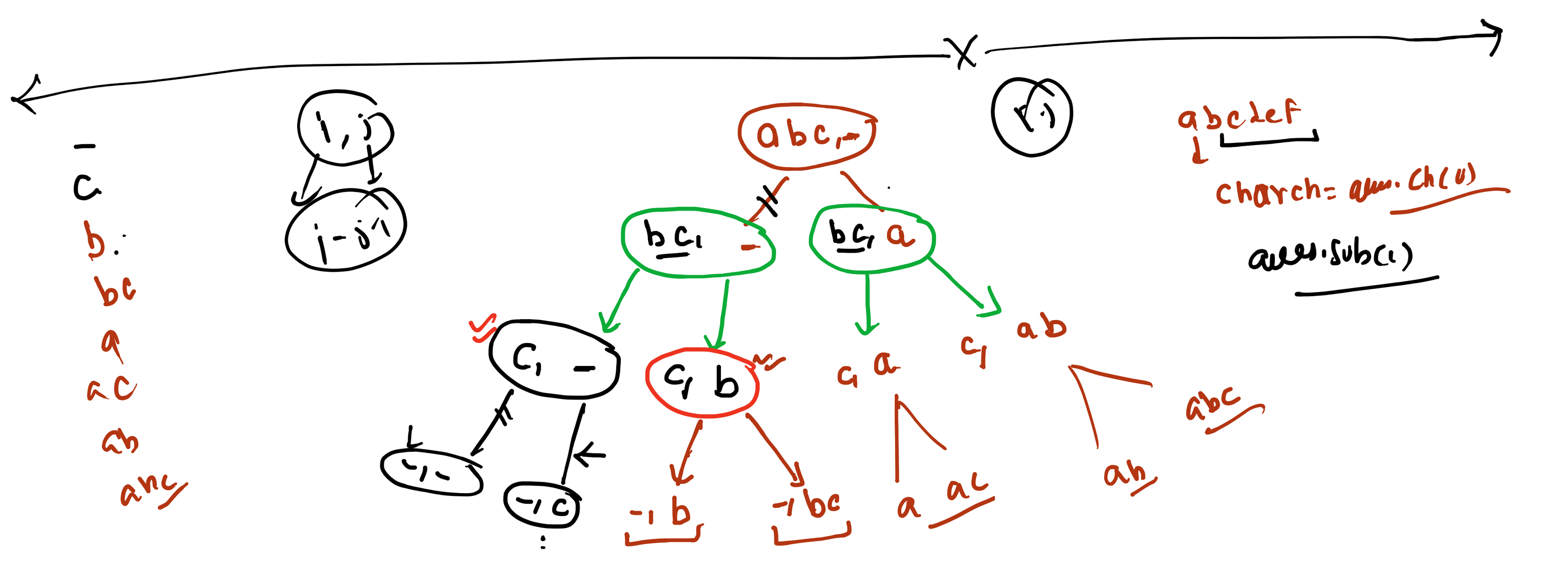
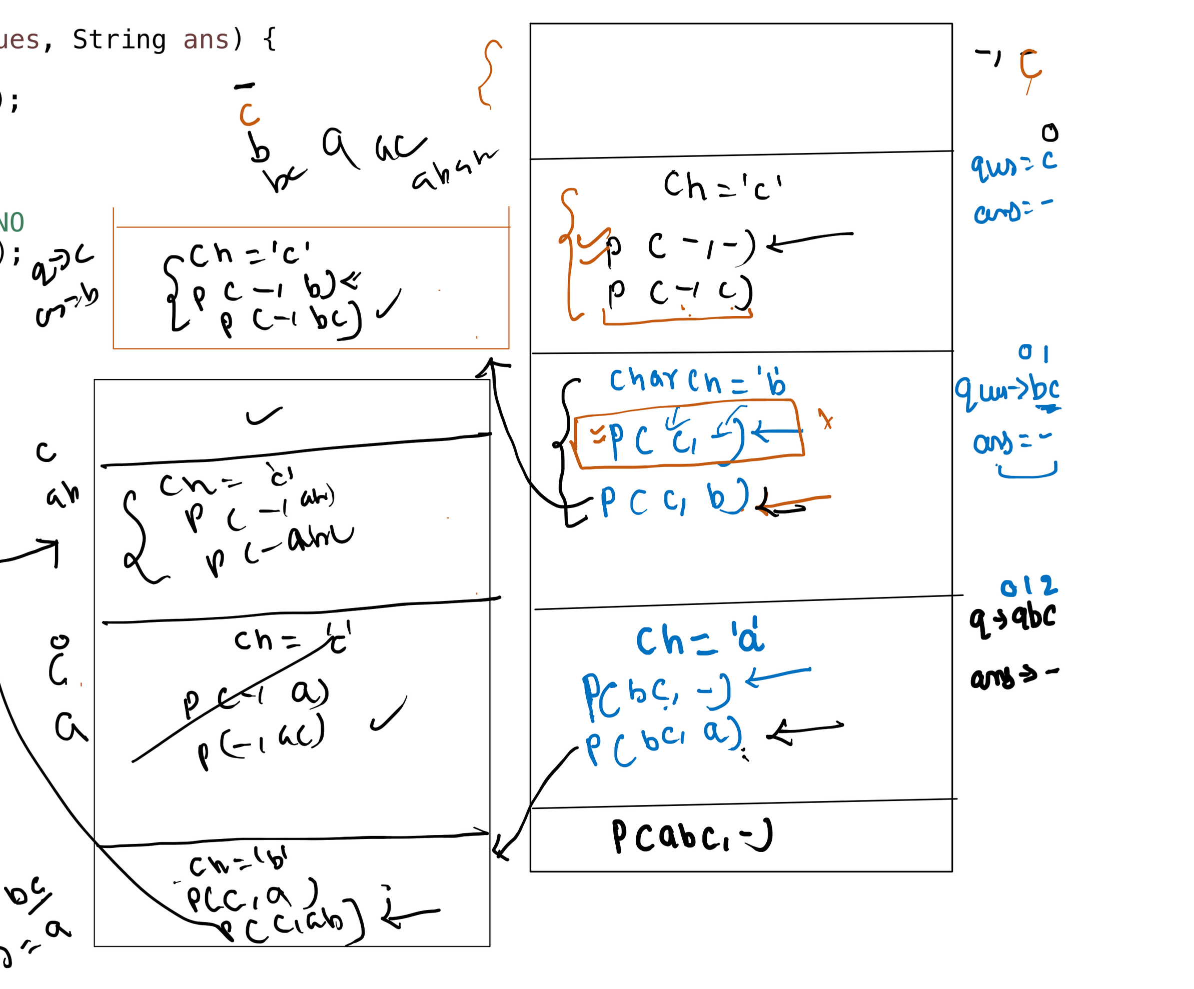
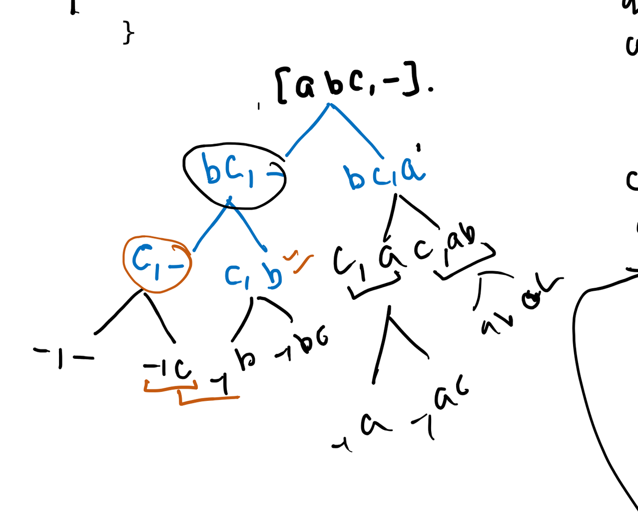
Lec-16



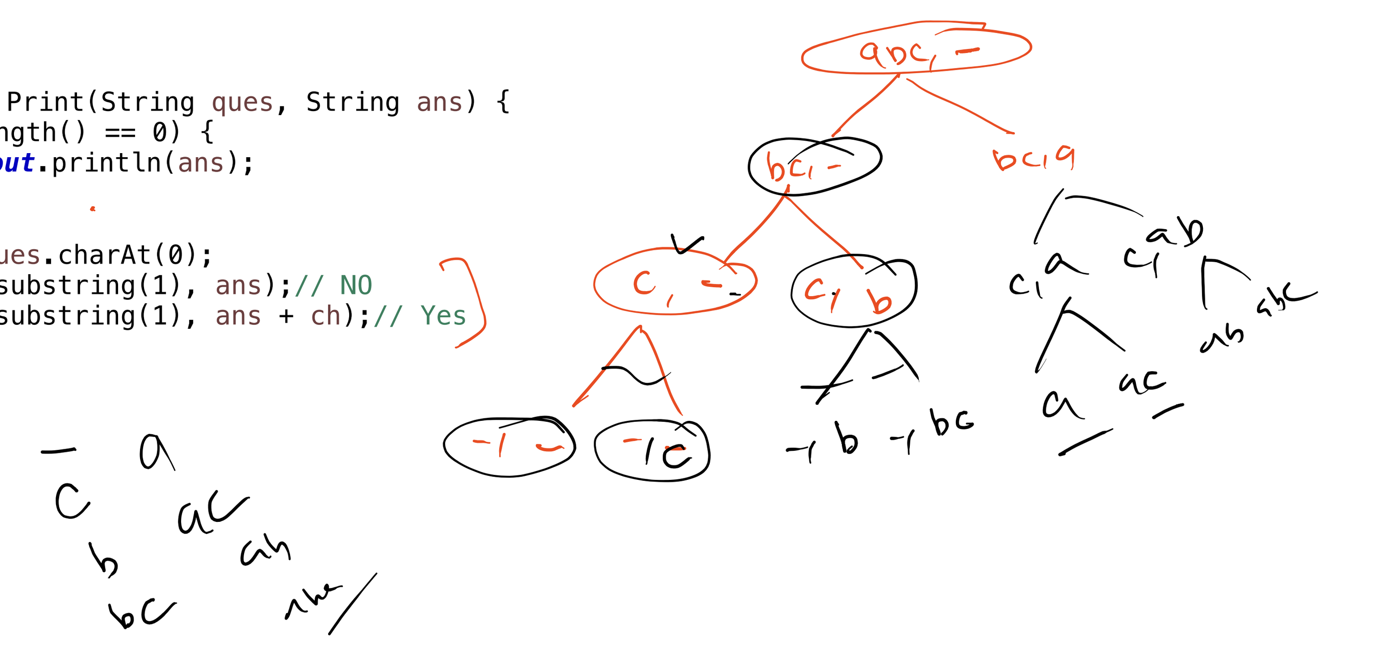


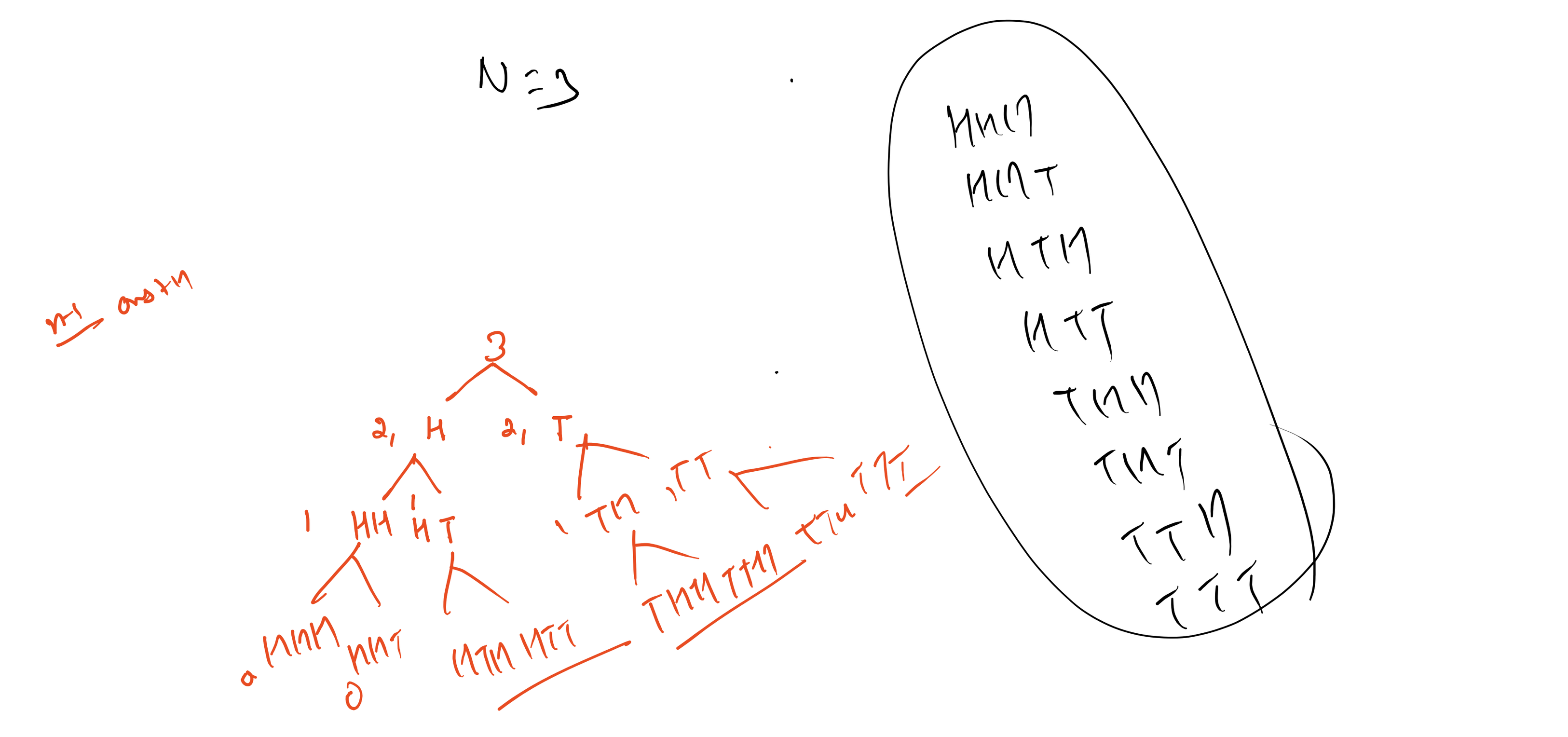
```java
public static void Print(String ques, String ans) {
        if (ques.length() == 0) {
            System.out.println(ans);
            return;
        }
        char ch = ques.charAt(0);
Print(ques.substring(1), ans);// NO
Print(ques.substring(1), ans + ch);
    }
```





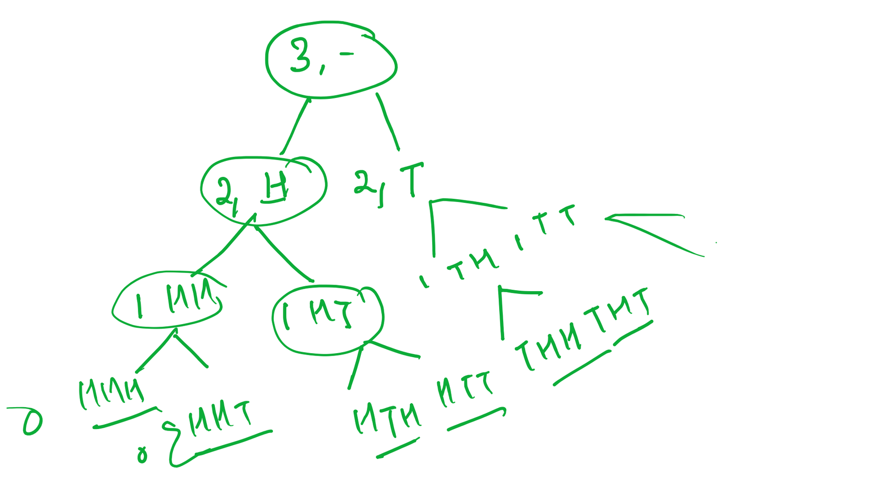
```java
public static void Print(String ques, String ans) {
        if (ques.length() == 0) {
            System.out.println(ans);
            return;
        }
        char ch = ques.charAt(0);
        Print(ques.substring(1), ans);// NO
        Print(ques.substring(1), ans + ch);// Yes
    }
```



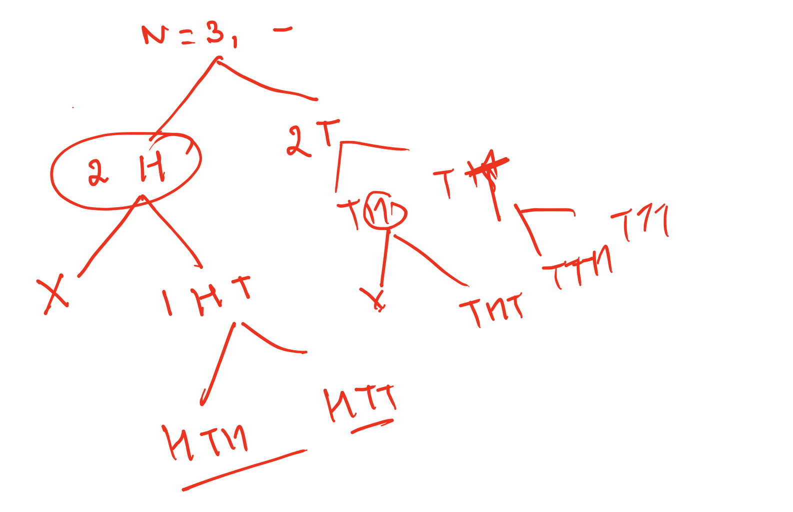


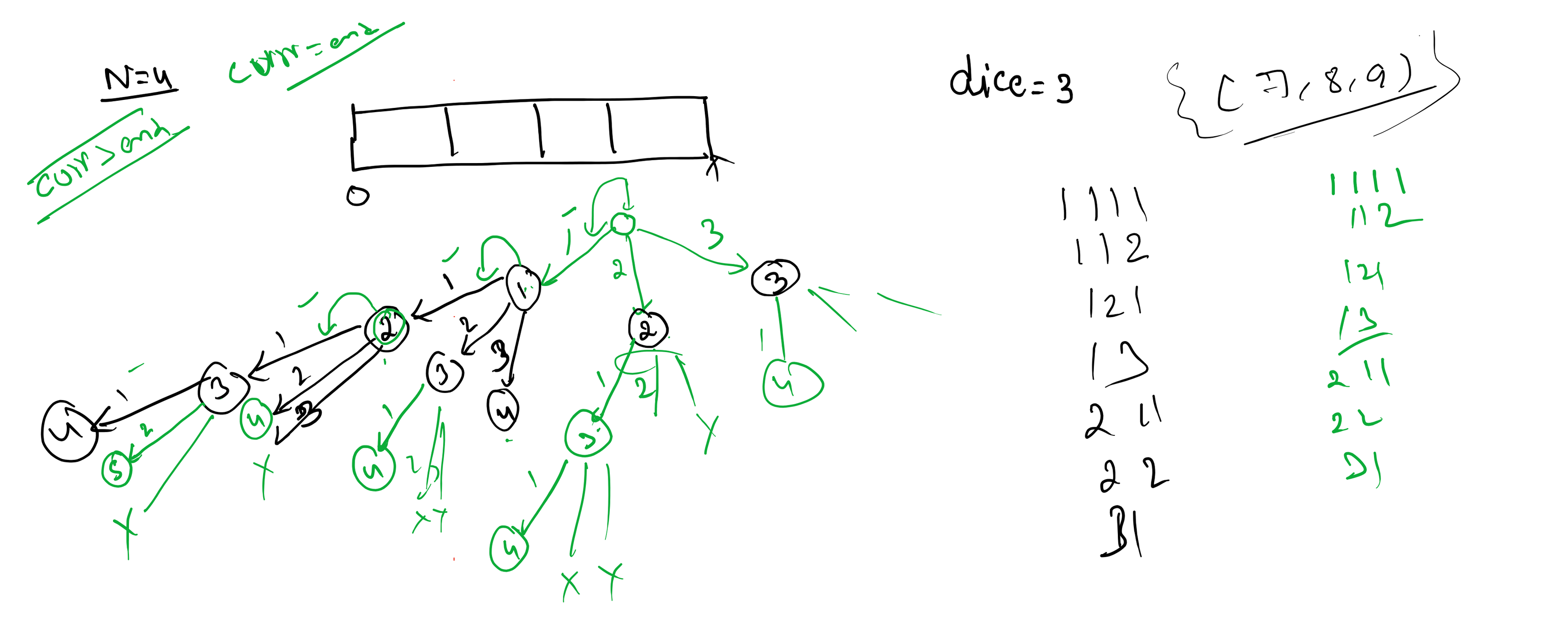
```java
public static void main(String[] args) {
    // TODO Auto-generated method stub
    int n = 3;
    Print(n, "");
}

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

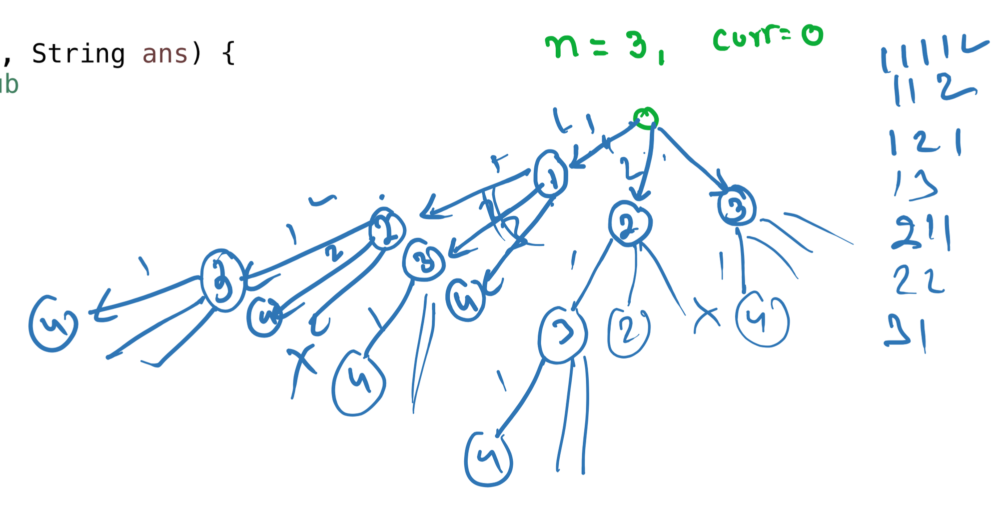


```java
public static void Print(int n, String ans) {
    if (n == 0) {
        System.out.println(ans);
        return;
    }
    Print(n - 1, ans + "H");
    Print(n - 1, ans + "T");
}
```

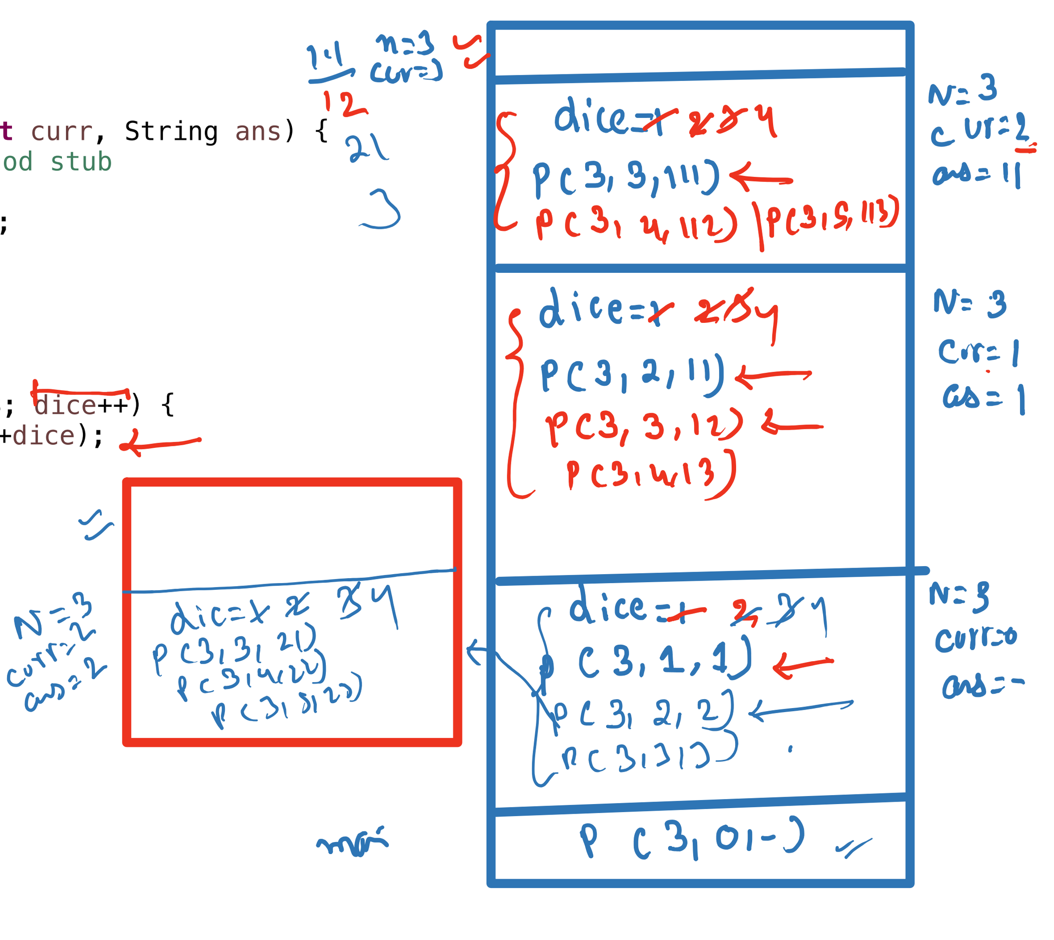


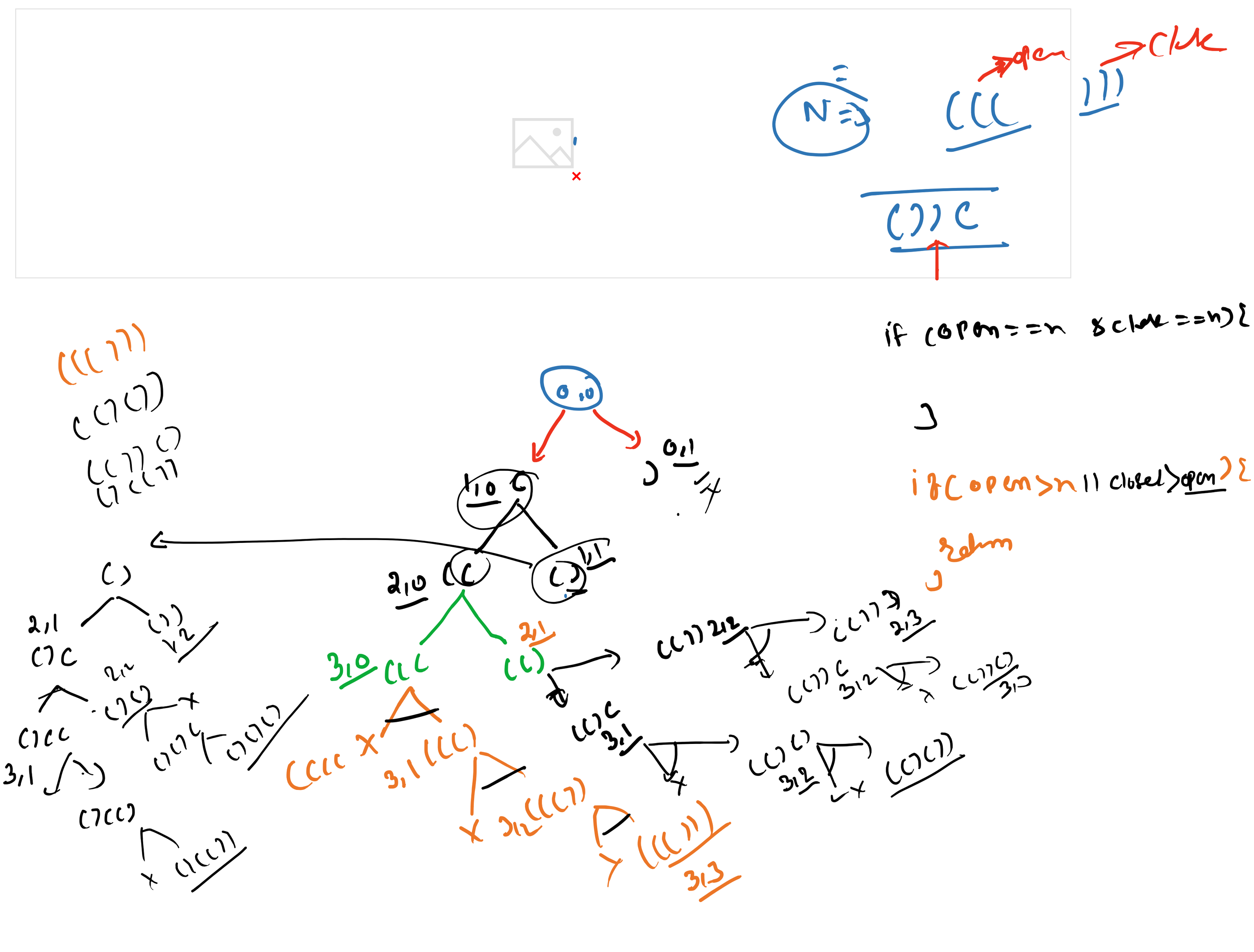


```java
public static void Print(int n, int curr, String ans) {
      // TODO Auto-generated method stub
      if(curr==n) {
          System.out.println(ans);
          return;
      }
      if(curr>n) {
          return;
      }
      Print(n, curr+1, ans+1);
      Print(n, curr+2, ans+2);
      Print(n, curr+3, ans+3);
    }
```



```java
public static void Print(int n, int curr, String ans) {
        // TODO Auto-generated method stub
        if(curr==n) {
            System.out.println(ans);
            return;
        }
        if(curr>n) {
            return;
        }
        for (int dice = 1; dice <=3; dice++) {
            Print(n, curr+dice, ans+dice);
        }
    }
```





```java
public static void Parentheses(int n, int open, int closed, String ans) {
        // TODO Auto-generated method stub
        if (open == n && closed == n) {
            System.out.println(ans);
            return;
        }
        if (open > n || closed > open) {
            return;
        }

        Parentheses(n, open + 1, closed, ans + "(");
        Parentheses(n, open, closed + 1, ans + ")");

    }
```