N Bit binary Number

* Find all N Bit Binary Number having more than equal to 1 than 0 for any prefix

N = 4

6

1101 ✓

1110

1001

1 ✓

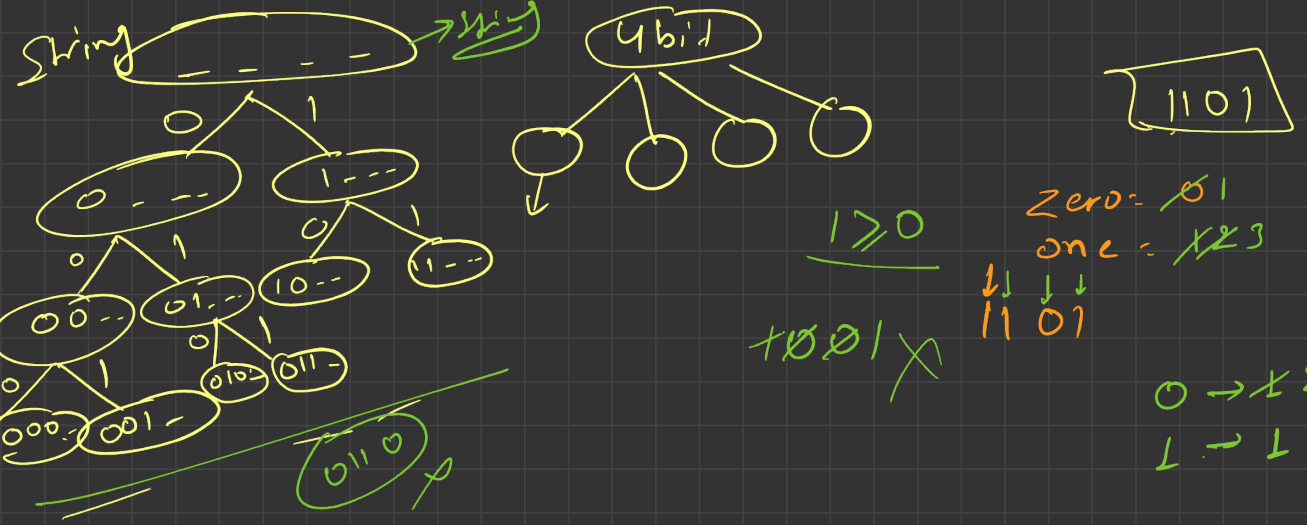
10 ✓

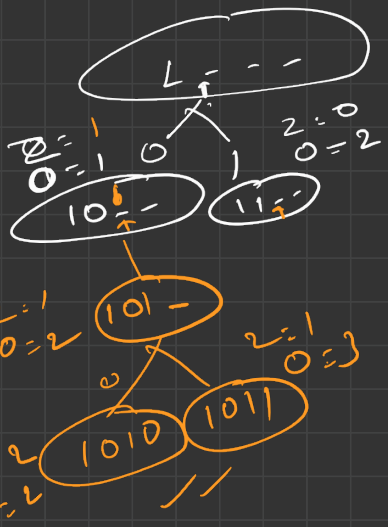
100X 100

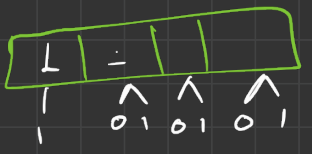
1001 ✓

1111 ✓

1000X



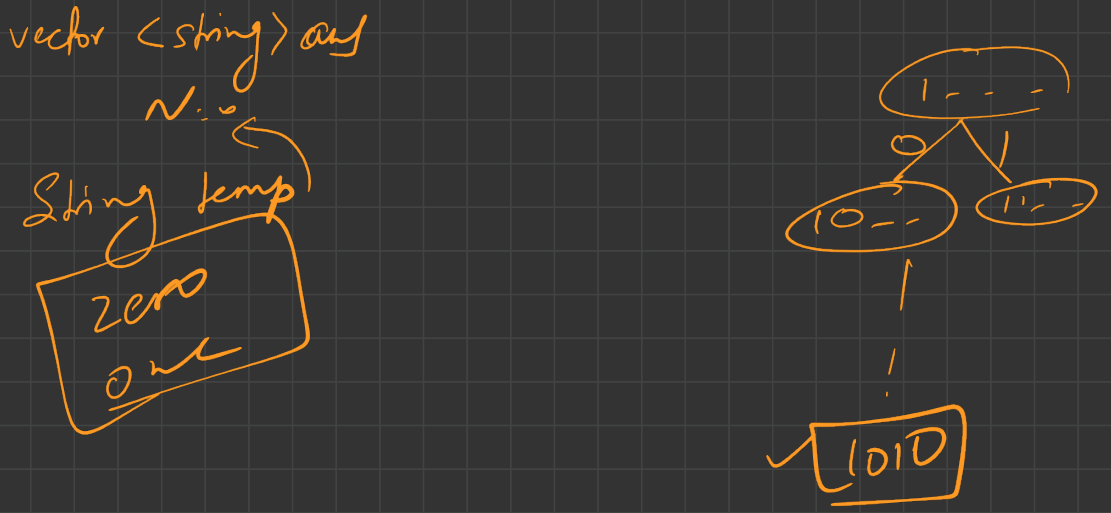




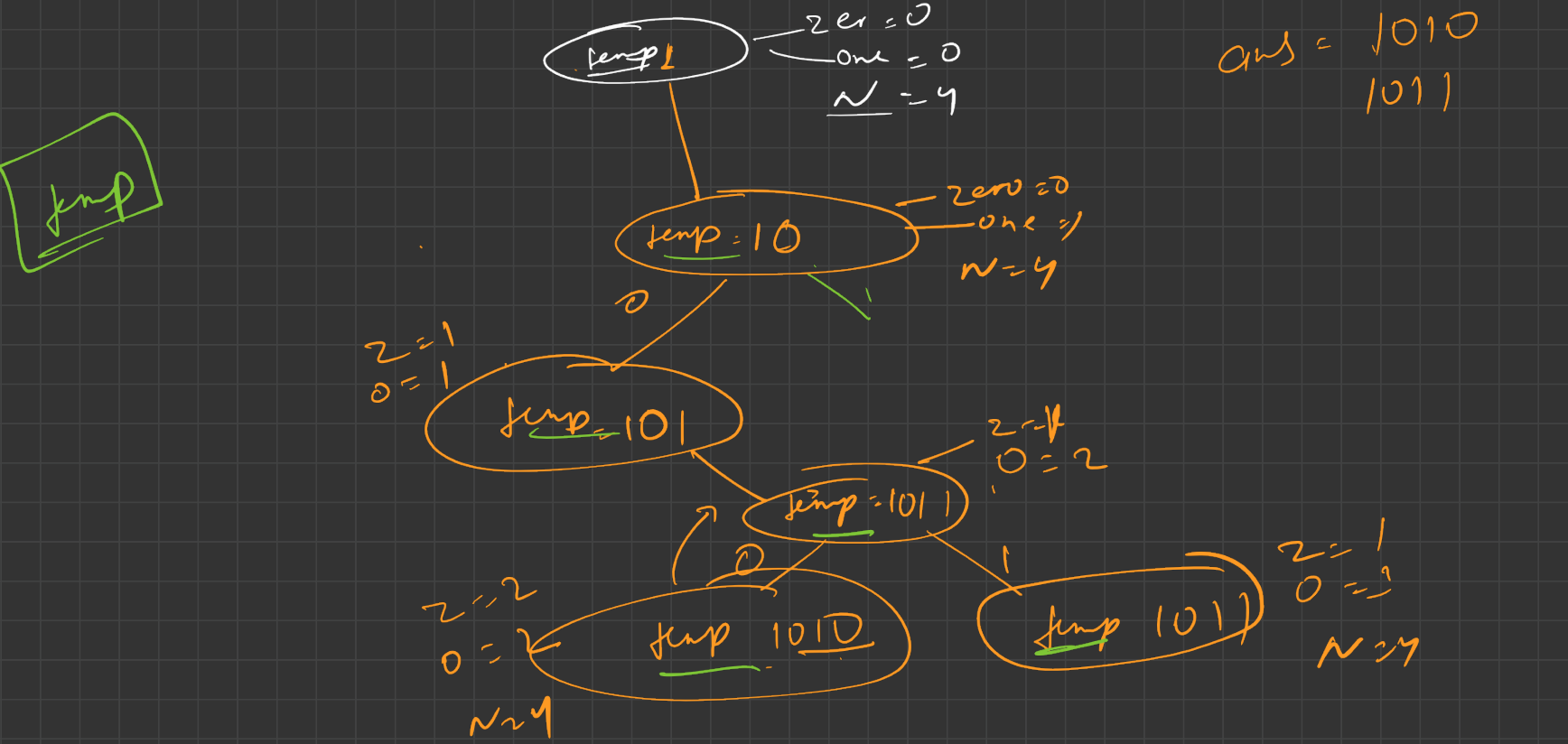
zero = 0
one = 1

64bit

```
if(zero <= one){
```



```
Find(int n, vector<string> &ans, string &temp, int zero,
     int one){
    if (temp.size() == n) {
        ans.push_back(temp);
        return;
    }
    if (zero < one){
        temp.push_back('0');
        Find(n, ans, temp, zero+1, one)
        temp.pop_back();
    }
    temp.push_back('1')
    Find(n, ans, temp, zero, one+1)
    temp.pop_back();
}
```



N-bit

y

N

0001

No. of one ≥ No. of zero

1001 ✓