Generating subsequence and at the same time storing it:

// C++ program to print distinct

// subsequences of a given string

#include <bits/stdc++.h>

using namespace std;

// Create an empty set to store the subsequences

unordered\_set<string> sn;

// Function for generating the subsequences

void subsequences(char s[], char op[], int i, int j)

{

    // Base Case

    if (s[i] == '\0') {

        op[j] = '\0';

        // Insert each generated

        // subsequence into the set

        sn.insert(op);

        return;

    }

    // Recursive Case

    else {

        // When a particular character is taken

        op[j] = s[i];

        subsequences(s, op, i + 1, j + 1);

        // When a particular character isn't taken

        subsequences(s, op, i + 1, j);

        return;

    }

}

// Driver Code

int main()

{

    char str[] = "ggg";

    int m = sizeof(str) / sizeof(char);

    int n = pow(2, m) + 1;

    // Output array for storing

    // the generating subsequences

    // in each call

    char op[n];

    // Function Call

    subsequences(str, op, 0, 0);

    // Output will be the number

    // of elements in the set

    cout << sn.size();

    sn.clear();

    return 0;

    // This code is contributed by Kishan Mishra

}