1. You are given a string S. Write a function to find the longest substring of the given string S which contains at most 2 unique characters. If there are more than 1 substrings of max length, then return any one. Example: S ="abbbccccbcbddeeffffabbbcbc" Output = ["bbbccccbcb"] S ="mississippi" Output = ["ississi"]. Best Solution takes O(N) time and O(1) space.
2. Create a function which reverses words of the given string. e.g: "This is great" , output – "great is This" in O(N)
3. Implement strtok - http://www.cplusplus.com/reference/cstring/strtok/
4. Given the size of the chess board and initial position of the knight, what is the probability that after k moves the knight will be inside the chessboard.
    a. The knight makes its all 8 possible moves with equal probability.
    b. Once the knight is outside the chessboard it cannot come back inside
5. Given three strings A, B and C. Write a function that checks whether C is an interleaving of A and B. C is said to be interleaving A and B, if it contains all characters of A and B and order of all characters in individual strings is preserved. Example
    a. A – abc, B – def, C – dabecf – True
    b. A – abacd, B – abaa, C – ababaacda – True
6. Given two sorted arrays such the arrays may have some common elements. Find the sum of the maximum sum path to reach from beginning of any array to end of any of the two arrays. We can switch from one array to another array only at common elements. Expected time complexity is O(m+n) where m is the number of elements in ar1[] and n is the number of elements in ar2[]. Examples:
    a. ar1[] = {2, 3, 7, 10, 12, 15, 30, 34}, ar2[] = {1, 5, 7, 8, 10, 15, 16, 19} Output: 122
7. Find The Largest Substring With All Unique Characters. For Ex- abcddajhelhcb answer is – dajhel
8. Given a number N, write a program to list the ways of obtaining N by using numbers from 1 to N-1 any number of times. Example :

Input -

N= 4

Output –

1,1,1,1

1,1,2,

1,3

2,2

3,1

2,1,1

1,2,1