C program to print t6he numbers that so not appear in Fibonacci series. The number of such terms to be printed should be given by the user.

```c
#include <stdio.h>

int main()
{
    int a=0,b=1,c=0,d,n,x;
    printf("Enter till what term do you want:");
    scanf("%d",&n);
    while(c<=n)
    {
        c=a+b;
        a=b;
        b=c;
        d=a+b;
        for(x=c+1;x<d;x++)
        {
            if(x<=n){
                printf("%d ",x);
            }else
            {
                break;
            }
        }
    }
}
```

input

```
Enter till what term do you want:35
4 6 7 9 10 11 12 14 15 16 17 18 19 20 22 23 24 25 26 27 28 29 30 31 32 33 35

...Program finished with exit code 0
Press ENTER to exit console.
```

C program to check whether a number is a Krishnamurthy number or not. A Krishnamurthy number is one whose sum of factorial of digits equals the number.

```c
#include <stdio.h>
int main()
{
    long fact;
    int Number, tempNum, rem, Sum = 0, i;
    printf("Enter Number to Check for Krishnamurthy Number:");
    scanf("%d", &Number);
    for (tempNum = Number; tempNum > 0; tempNum = tempNum / 10)
    {
        fact = 1;
        rem = tempNum % 10;
        for (i = 1; i <= rem; i++)
        {
            fact = fact * i;
        }
        Sum = Sum + fact;
    }
    if (Number == Sum)
    printf("%d is a Krishnamurthy Number.\n", Number);
    else
    printf("%d is not a Krishnamurthy Number.\n", Number);
}
```

input

```
Enter Number to Check for Krishnamurthy Number:145
145 is a Krishnamurthy Number.


...Program finished with exit code 0
Press ENTER to exit console.
```

C program to print the second largest number among a list of numbers without using array.

```c
#include<stdio.h>
int main()
{
    int i, m1, m2, n, num;
    printf("Enter the elements:");
    scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        scanf("%d",&num);
        if(i==0)
        {
            m1 = num;
            m2 = num;
        }
        else if(num == -1)
        {
            break;
        }
        else if(num>m1)
        {
            m2 = m1;
            m1 = num;
        }
        else if(num>m2)
        {
            m2=num;
        }
    }
    printf("Second largest number is %d",m2);
}
```

input

```
Enter the elements:4 6 7 8 9
Second largest number is 8

...Program finished with exit code 0
Press ENTER to exit console.
```

C program to print the quotient of an integer number without using '/'.

```c
#include <stdio.h>

int main()
{
    int x,y,q=0;
    printf("Enter the dividend:");
    scanf("%d",&x);
    printf("enter the divisor:");
    scanf("%d",&y);

    while(x>=y)
    {
        x=x-y;
        q=q+1;
    }

    printf("the quotient is %d",q);
}
```

input

```
Enter the dividend:24
enter the divisor:2
the quotient is 12

...Program finished with exit code 0
Press ENTER to exit console.
```

C program that accepts a word from the user and prints it in the following way

```c
#include<stdio.h>
int main()
{
    char str[100];
    printf("Enter a string: ");
    scanf("%[^\n]",str);
    for(int i=0; str[i]!='\0'; i++)
    {
        for(int j=0; j<=i; j++)
        {
            printf("%c", str[j]);
        }
        printf("\n");
    }
}
```

input

```
Enter a string: ASTRONAUT
A
AS
AST
ASTR
ASTRO
ASTRON
ASTRONA
ASTRONAU
ASTRONAUT


...Program finished with exit code 0
Press ENTER to exit console.
```

C program to remove white spaces from string.

```c
#include <stdio.h>
#include<string.h>
int main()
{
    char s[1000];
    int  i,k=0;
    printf("\n\nEnter  the string : ");
    gets(s);
    for(i=0;s[i];i++)
    {
        s[i]=s[i+k];
        if(s[i]==' '|| s[i]=='\t')
        {
            k++;
            i--;
        }
    }
    printf("\nString after removing all blank spaces:");
    printf("%s",s);
}
```

```
Enter  the string : ISS commander Pritha Singh

String after removing all blank spaces:ISScommanderPrithaSingh

...Program finished with exit code 0
Press ENTER to exit console.
```

C program to check two strings is Anagram.

```c
#include<stdio.h>
#include<conio.h>
#include<string.h>
int main()
{
    char str1[20], str2[20];
    int len, len1, len2, i, j, found=0, not_found=0;
    printf("\n\nEnter first string:");
    gets(str1);
    printf("Enter second string:");
    gets(str2);
    len1 = strlen(str1);
    len2 = strlen(str2);
    if(len1 == len2){
        len = len1;
        for(i=0; i<len; i++){
            found = 0;
            for(j=0; j<len; j++){
                if(str1[i] == str2[j]){
                    found = 1;
                    break;
                }
            }
            if(found == 0){
                not_found = 1;
                break;
            }
        }
        if(not_found == 1)
            printf("Strings are not Anagram.");
        else
            printf("Strings are Anagram.");
    }
    else
    printf("Both string must contain same number of character to be an Anagram Strings");
}
```

```
Enter first string:Astronomer
Enter second string:Moonstarer
Strings are not Anagram.

...Program finished with exit code 0
Press ENTER to exit console.
```

C program to read a text and count all the occurrences of a particular letter given by the user.

```c
#include <stdio.h>
#include <string.h>
#define MAX_SIZE 100
int countOccurrences(char * str, char * toSearch);
int main()
{
    char str[MAX_SIZE];
    char toSearch[MAX_SIZE];
    int count;
    printf("\n\nEnter any string: ");
    gets(str);
    printf("Enter word to search occurrences: ");
    gets(toSearch);
    count = countOccurrences(str, toSearch);
    printf("Total occurrences of '%s': %d", toSearch, count);
}
int countOccurrences(char * str, char * toSearch)
{
    int i, j, found, count;
    int stringLen, searchLen;
    stringLen = strlen(str);
    searchLen = strlen(toSearch);
    count = 0;
    for(i=0; i <= stringLen-searchLen; i++){
        found = 1;
        for(j=0; j<searchLen; j++){
            if(str[i + j] != toSearch[j]){
                found = 0;
                break;
            }
        }
        if(found == 1){
            count++;
        }
    }
    return count;
}
```

```
Enter any string: icecream
Enter word to search occurrences: c
Total occurrences of 'c': 2

...Program finished with exit code 0
Press ENTER to exit console.
```

C program that capitalizes all the letters of a string.

```c
#include <stdio.h>
#include <string.h>

void convertToUppercase(char *givenStr)
{
    int i;
    for (i = 0; givenStr[i] != '\0'; i++)
    {
        if (givenStr[i] >= 'a' && givenStr[i] <= 'z')
        {
            givenStr[i] = givenStr[i] - 32;
        }
    }
}
int main()
{
    char givenStr[100];

    printf("Enter a string :");
    fgets(givenStr, 100, stdin);

    convertToUppercase(givenStr);
    puts(  givenStr);
}
```

input

```
Enter a string :Hey Houston this is ISS commander Pritha Singh speaking!
HEY HOUSTON THIS IS ISS COMMANDER PRITHA SINGH SPEAKING!



...Program finished with exit code 0
Press ENTER to exit console.
```

C program that deletes a word from sentence. Note that the word may appear any number of times.

```c
#include<stdio.h>
#include<string.h>

int main()
{
    int i, j = 0, k = 0,n = 0;
    int flag = 0;
    char str[100], neww[100], word[100];
    printf("\n\nEnter a string: ");
    gets(str);
    printf("Enter the word you want to remove from the above string: ");
    gets(word);
    for(i = 0 ; str[i] != '\0' ; i++)
    {
        k = i;
        while(str[i] == word[j])
        {
            i++,j++;
            if(j == strlen(word))
            {
                flag = 1;
                break;
            }
        }
    j = 0;
    if(flag == 0)
        i = k;
    else
        flag = 0;
    neww[n++] = str[i];
    }
    neww[n] = '\0';
    printf("New string: %s",neww);
}
```

```
Enter a string: My name ghgjk is Pritha Singh.
Enter the word you want to remove from the above string: ghgjk
New string: My name  is Pritha Singh.

...Program finished with exit code 0
Press ENTER to exit console.
```

C program to find a string within a sentence and replace it with another string.

```c
#include <stdio.h>
int main()
{
    int n, match, len;
    printf("Enter the number of words in your Sentence:");
    scanf("%d", &n);
    char str[n][100], checkstr[100], newstr[100];
    printf("Enter the word:");
    for(int i=0; i<n; i++){
        scanf("%s", str[i]);
    }
    printf("Enter the words to replace:");
    scanf("%s", checkstr);
    printf("Enter the new word:");
    scanf("%s", newstr);
    len = sizeof(checkstr)/sizeof(char);
    for(int i=0; i<n; i++){
        match = 0;
        for(int j=0; j<len; j++){
            if(checkstr[j] != str[i][j]){
                break;
            }else{
                match=1;
                continue;
            }
        }
        if(match){
            for(int k=0; k<len; k++){
                str[i][k] = newstr[k];
            }
        }
    }
    for(int i=0; i<n; i++){
        printf("%s ", str[i]);
    }
}
```

```
Enter the number of words in your Sentence:4
Enter the word:this is my keyboard
Enter the words to replace:keyboard
Enter the new word:laptop
this is my laptop

...Program finished with exit code 0
Press ENTER to exit console.
```

C program that takes the name of the person as input and prints the first letter of the first name and middle name (if any), and the title.

```c
#include <stdio.h>

int main()

{
    char fname[100], mname[100], lname[100];
    printf("Enter full name:");
    scanf("%s %s %s", fname, mname, lname);
    printf("Abbreviated name:");
    printf("%c.%c.%s\n", fname[0], mname[0], lname);
}
```

input

```
Enter full name:Amrit Pal Dhillon
Abbreviated name:A.P.Dhillon


...Program finished with exit code 0
Press ENTER to exit console.
```

C program to find LCM of two numbers.

```c
#include <stdio.h>

int main()
{
    int i, num1, num2, max, lcm=1;
    printf("Enter any two numbers to find LCM: ");
    scanf("%d%d", &num1, &num2);
    max = (num1 > num2) ? num1 : num2;
    i = max;
    while(1)
    {
        if(i%num1==0 && i%num2==0)
        {
            lcm = i;
            break;
        }
        i += max;
    }
    printf("LCM of %d and %d = %d", num1, num2, lcm);
}
```

input

```
Enter any two numbers to find LCM: 13 21
LCM of 13 and 21 = 273

...Program finished with exit code 0
Press ENTER to exit console.
```

C program to rearrange an array in reverse order without using a second array.

```c
#include <stdio.h>
#define n 5

int main()
{
    int a[n], i;
    printf("Enter the elements of Array:");
    for(i=0; i<n; i++)
    {
        scanf("%d", &a[i]);
    }
    printf("The Array entered is: ");
    for(i=0; i<n; i++)
    {
        printf("%d ", a[i]);
    }
    printf("\nThe new Array is: ");
    for(i=(n-1); i>=0; i--)
    {
        printf("%d ", a[i]);
    }
}
```

input

```
Enter the elements of Array:1 2 3 4 5
The Array entered is: 1 2 3 4 5
The new Array is: 5 4 3 2 1

...Program finished with exit code 0
Press ENTER to exit console.
```

C program using pointers to read an array of integers and print its elements in reverse order.

```c
#include<stdio.h>
#define MAX_SIZE 100
int main()
{
    int arr[MAX_SIZE];
    int N,i;
    int * ptr=arr;
    printf("Enter the size of the array:");
    scanf("%d", &N);
    printf("Enter the elements of the array:");
    for(i=0; i<N; i++)
    {
        scanf("%d",ptr);
        ptr++;
    }
    ptr = arr;
    printf("Array elements:");
    for(i=0; i<N; i++)
    {
        printf("%d, ", *ptr);
        ptr++;
    }
}
```

input

```
Enter the size of the array:5
Enter the elements of the array:1 2 3 4 5
Array elements:1, 2, 3, 4, 5,

...Program finished with exit code 0
Press ENTER to exit console.
```

C program to convert the given string "Hello" to "olleH" using recursion.

```c
#include <stdio.h>
#include <string.h>

void reverse(char *input, int begin, int end)
{
    char temp;
    if (begin >= end)
    return;
    temp = *(input + begin);
    *(input + begin) = *(input + end);
    *(input + end) = temp;
    reverse(input, ++begin, --end);
}

int main()
{
    char input[100];
    printf("\n\nEnter the string:");
    gets(input);
    reverse(input, 0, strlen(input) - 1);
    printf("Reversed string:%s", input);
}
```

```
Enter the string:astronaut
Reversed string:tuanortsa

...Program finished with exit code 0
Press ENTER to exit console.
```

C program that reads a sentence and prints the frequency of each of the vowels and total count of consonants.

```c
#include <stdio.h>
int main()
{
    char line[150];
    int vowels, consonant;
    vowels = consonant = 0;
    printf("\n\nEnter a line of string: ");
    fgets(line, sizeof(line), stdin);
    for (int i = 0; line[i] != '\0'; ++i)
    {
        line[i] = tolower(line[i]);
        if (line[i] == 'a' || line[i] == 'e' || line[i] == 'i' || line[i] == 'o' || line[i] == 'u')
        {
            ++vowels;
        }
        else if ((line[i] >= 'a' && line[i] <= 'z'))
        {
            ++consonant;
        }
    }
    printf("Vowels: %d", vowels);
    printf("\nConsonants: %d", consonant);
}
```

```
Enter a line of string: this is an online compiler and debuggerr.
Vowels: 13
Consonants: 21

...Program finished with exit code 0
Press ENTER to exit console.
```

C program to return maximum occurring character in an input string.

```c
#include <stdio.h>
#define MAX_SIZE 100
#define MAX_CHARS 255

int main()
{
    char str[MAX_SIZE];
    int freq[MAX_CHARS];
    int i = 0, max;
    int ascii;
    printf("\n\nEnter any string: ");
    gets(str);
    for(i=0; i<MAX_CHARS; i++)
    {
        freq[i] = 0;
    }
    i=0;
    while(str[i] != '\0')
    {
        ascii = (int)str[i];
        freq[ascii] += 1;

        i++;
    }
    max = 0;
    for(i=0; i<MAX_CHARS; i++)
    {
        if(freq[i] > freq[max])
            max = i;
    }
    printf("Maximum occurring character is '%c' = %d times.", max, freq[max]);
}
```

input

```
Enter any string: occurence
Maximum occurring character is 'c' = 3 times.

...Program finished with exit code 0
Press ENTER to exit console.
```

C program to read name and marks of n number of students from user and store them in a file.

main.c C:\student.txt

```c
#include <stdio.h>
#include<stdlib.h>
int main()
{
    char name[50];
    int marks,i,n;
    printf("Enter number of students: ");
    scanf("%d",&n);
    FILE *fptr;
    fptr=(fopen("C:\\student.txt","a"));
    if(fptr==NULL)
    {
        printf("Error!");
        exit(1);
    }
    for (i=0;i<n;++i)
    {
        printf("For student%d\nEnter name: ",i+1);
        scanf("%s",name);
        printf("Enter marks: ");
        scanf("%d",&marks);
        fprintf(fptr,"\nName: %s \nMarks=%d \n",name,marks);
    }
    fclose(fptr);
}
```

main.c | C:\student.txt

```
1  Name: Pritha
2  Marks=100
3
4  Name: Harshita
5  Marks=100
6
7  Name: Megha
8  Marks=99
9
10 Name: Yukta
11 Marks=98
12
13 Name: Yashika
14 Marks=97
15
```

input

```
Enter number of students: 5
For student1
Enter name: Pritha
Enter marks: 100
For student2
Enter name: Harshita
Enter marks: 100
For student3
Enter name: Megha
Enter marks: 99
For student4
Enter name: Yukta
Enter marks: 98
For student5
Enter name: Yashika
Enter marks: 97


...Program finished with exit code 0
Press ENTER to exit console.
```

C program to find the determinant of a matrix.

```c
#include<stdio.h>

int main()
{
    int rows, columns, a[3][3];
    int x, y, z, Determinant = 0;
    printf("Enter the elements for 3x3 matrix:");
    for(rows = 0; rows < 3; rows++)
    {
        for(columns = 0;columns < 3; columns++)
        {
            scanf("%d", &a[rows][columns]);
        }
    }

    x = (a[1][1] * a[2][2]) - (a[2][1] * a[1][2]);
    y = (a[1][0] * a[2][2]) - (a[2][0] * a[1][2]);
    z = (a[1][0] * a[2][1]) - (a[2][0] * a[1][1]);
    Determinant = (a[0][0] * x) - (a[0][1] * y) + (a[0][2] * z);
    printf("Determinant of the given matrix is:%d", Determinant);
}
```

input

```
Enter the elements for 3x3 matrix:1 2 1 3 7 6 2 4 7
Determinant of the given matrix is:5

...Program finished with exit code 0
Press ENTER to exit console.
```