

**Aim:**

Write a C program that splits a given string into words based on spaces. The program should print each word in a new line.

**Input Format:**

- The input is a single string containing words separated by spaces.

**Output Format:**

- The program should output each word in the input string on a new line.

**Constraints:**

- The string should contain at most 100 characters.

**Note:**

- Add a new line char "\n" at the end of output.

**Source Code:**

splitstring.c

```
#include<stdio.h>
#include<string.h>
#define MAX_STRING_LENGTH 100
int main(){
    char str[MAX_STRING_LENGTH];
    char *token;
    fgets(str, sizeof(str), stdin);
    str[strcspn(str, "\n")] = '\0';
    token = strtok(str, " ");
    while (token != NULL){
        printf("%s\n", token);
        token = strtok(NULL, " ");
    }
    return 0;
}
```

**Execution Results** - All test cases have succeeded!

Test Case - 1
User Output
Hello world!!
Hello
world!!

Test Case - 2
User Output
This is a C program
This

is
a
C
program