All languages have Grammar. When people frame a sentence we usually say whether the sentence is framed as per the rules of the Grammar or Not. Similarly use the same ideology, implement to check whether the given input string is satisfying the grammar or not .

#include <stdio.h>

#include <stdbool.h>

#include <ctype.h>

#include <string.h>

bool is\_punctuation(char c) {

    return (c == '.' || c == '?' || c == '!');

}

bool is\_whitespace(char c) {

    return (c == ' ' || c == '\t' || c == '\n');

}

bool is\_valid\_sentence(char \*sentence) {

    int len = strlen(sentence);

    int i = 0;

    while (i < len && is\_whitespace(sentence[i]))

        i++;

    if (i == len || is\_punctuation(sentence[i]))

        return false;

    bool seen\_space = false;

    bool seen\_letter = false;

    for (; i < len; i++) {

        if (is\_whitespace(sentence[i])) {

            if (seen\_space)

                return false;

            seen\_space = true;

            seen\_letter = false;

        } else if (is\_punctuation(sentence[i])) {

            if (i != len - 1)

                return false;

            if (!seen\_letter)

                return false;

        } else if (isalpha(sentence[i])) {

            seen\_space = false;

            seen\_letter = true;

        } else {

            return false;

        }

    }

    return true;

}

int main() {

    char input[1000];

    printf("Enter a sentence: ");

    fgets(input, sizeof(input), stdin);

    input[strcspn(input, "\n")] = 0

    if (is\_valid\_sentence(input))

        printf("Valid sentence.\n");

    else

        printf("Invalid sentence.\n");

    return 0;

}

Output:

