

Aim:

Write a C Program to perform the following operations on a given paragraph using built-in functions

- Replace a given word with another word

Source Code:

replace.c

```
#include<stdio.h>
#include<string.h>
void replaceWord(const char *paragraph, const char *oldWord, const char *newWord){
    char result[1000];
    int i = 0, j = 0;
    int oldWordLen = strlen(oldWord);
    int newWordLen = strlen(newWord);
    printf("Original Paragraph: %s\n", paragraph);
    while(paragraph[i] != '\0') {
        if(strstr(&paragraph[i],oldWord)==&paragraph[i]){
            strcpy(&result[i],newWord);
            j += newWordLen;
            i += oldWordLen;
        }else{
            result[j++] = paragraph[i++];
        }
    }
    result[j] = '\0';
    printf("After replacing: %s\n", result);
}
int main(){
    char paragraph[1000];
    char oldWord[100], newWord[100];
    printf("Enter a paragraph: ");
    fgets(paragraph,sizeof(paragraph),stdin);
    paragraph[strcspn(paragraph, "\n")] = 0;
    printf("word to replace: ");
    scanf("%s", oldWord);
    printf("new word: ");
    scanf("%s",newWord);
    replaceWord(paragraph, oldWord, newWord);
    return 0;
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter a paragraph: Roses are pink,violets are blue.
word to replace: pink
new word: red
Original Paragraph: Roses are pink,violets are blue.
After replacing: Roses are red,violets are blue.

Test Case - 2
User Output
Enter a paragraph: This is a C programming structure.
word to replace: structure
new word: language
Original Paragraph: This is a C programming structure.
After replacing: This is a C programming language.