

BACHELOR OF COMPUTER APPLICATIONS

Introduction to program using c **ASSIGNMENT - III**

QUESTION - I

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Code Overview

The program takes two input strings and modifies the second string by removing characters that exist in the first string.

Variable Declaration

Two character arrays 'str1' and 'str2' of size 100 are declared to store user-input strings.

User Input

- The program prompts the user to enter two strings.
- It uses “fgets” to read the strings.

String Length Calculation

The lengths of “str1” & “str2” are calculated using the “strlen()” function.

String Comparison and Removal

- The code enters nested loops to compare characters in str1 with characters in str2. If a

character from str1 matches a character in str2, it is removed from str2.

- Removal is accomplished by shifting all characters after the matching character one position to the left.
- After removing a character, the length len2 of str2 is decremented, and the inner loop index 'j' is adjusted to recheck the current position.

Null-Termination

The code adds a null character '\0' at the end of str2 to mark the end of the modified string.

Result Display

The program prints the resultant string, which is the modified str2 with characters removed.

Test case

Case1:

```
Enter the first string: Statue of Unit  
Enter the second string: Gandhi Ashram  
Resultant string: GdhAshrm
```

Case2:

```
Enter the first string: Gandhi Ashram  
Enter the second string: Statue of Unit  
Resultant string: SttueofUt
```

Flowchart

