



**भारतीय सूचना प्रौद्योगिकी संस्थान गुवाहाटी**  
**Indian Institute of Information Technology Guwahati**  
**COMPUTER PROGRAMMING LAB (CS110)**  
**ASSIGNMENTS-10**

1. Write a menu-based (use `do... while` loop to create the menu) program in C to perform following operations on strings.
  - i. Concatenate two strings **without** using the `strcat` function. The strings are user inputs.
  - ii. Compare two strings **without** using the `strcmp` function. The strings are user inputs.
  - iii. Calculate length of a string **without** using the `strlen` function. The string is a user input.
  - iv. Copy one string to another string **without** using the `strcpy` function. The string is user input.
  - v. “exit” to terminate the program.
2. Write a program in C to calculate the number of vowels in a string. The string is user input.
3. Write a program in C to check if a string is a palindrome or not. The string is user input.
4. Write a program in C to reverse a string. The string is user input. **Without** using `string.h`
5. Write a program in C to count the number of words in a function.
6. Write a program in C to print locations (index) of given word in a sentence.
7. Write a program in C to word-wise reverse a string. The string is user input. For instance for input string

This is an example.

the output should be

example. an is This

8. Write a program in C to find the number of times a given word 'the' appears in the given string.
9. Write a program in C to remove characters from a string except alphabets.