

Jadavpur University
Session 2022-2023, Odd Semester
Computer Programming and Numerical Methods
Group A3, BCSE 1

Function and Pointer

1. Write recursive functions for following tasks.
 - a. Binary equivalent of a number.
 - b. Sum of individual digits of a number passed as argument.
2. Write a C program using functions which accepts a string from the user and performs the following tasks.
 - a. Counts the number of characters in the string without using string library functions.
 - b. Prints the reverse of the string without using string library functions.
3. Write a C program which accepts a full name from the user prints the initials. Eg. SRT for Sachin Ramesh Tendulkar.
4. Write a program to count the number of occurrences of any two vowels in succession in a line of text.
5. Write a program that converts (Do not use any string library function):
 - a. A string like "123" to integer 123.
 - b. An integer like 123 to string "123".
6. Write a C program which accepts a string from the user and performs the following tasks. (Do not use any string library function.)
 - a. Check whether it is palindrome or not. [Example of a palindrome string: "abcba", "abba"]
 - b. Counts the number of characters and words in it.
7. Write a program in C to store n numbers in an array and print the elements using pointers. Also compute the sum of all elements of that array using pointers.
8. Write a C function which accepts a string str1 and returns a new string str2 which is str1 with each word reversed. Do not use any string library function.
9. Write a function squeeze(s,c) which removes all occurrences of the character c from the string s.
10. Write the function strend(s,t), which returns 1 if the string t occurs at the end of the string s, and zero otherwise.