

# International Islamic University Chittagong

Department of Computer Science & Engineering  
CSE 1122 Computer Programming I Sessional

## Lab Assignment – IV

1. Write a program to convert an integer from decimal to binary.
2. Write a program to sort n numbers taken from keyboard.
3. Write a program to interchange column and row by each other.
4. Write a program to calculate row sum and column sum.
5. Write a program to add two tables of number.
6. Write a program to encode a given string using piglatin generator.
7. Write a program to determine whether the given string is a palindrome or not.
8. Write a program using pointer notation that will sort n numbers taken from the keyboard.
9. Write a program using structure that will allow you to enter and display the following information about your family members:  
i) name ii) age iii) last degree iv) occupation v) salary
10. Write a C program that reads several different names and addresses into computer, rearranges the names into alphabetical order, and then writes out the alphabetized list. Make use of structure variables within the program.
11. Write a program which read a line of text from the keyboard and write it out to a data file called TEST.DAT. And then display the contents of the file on the screen.
12. Write a program to write 100 randomly generated integer to a file called RAND. DAT. And then read the contents of the file and display them on the screen in the sorted manner.
13. Write a program to copy a string in to another string without using built in function of string copy.
14. Write a program to concatenate two strings without using built in function of concatenation.
15. Write a program to reverse a string .
16. Write a program that will illustrate the equivalence between shifting a binary number to the left n bits and multiplying the binary number by  $2^n$ .
17. Write a program that will illustrate the equivalence between shifting a binary number to the right n bits and dividing the binary number by  $2^n$ .
18. Write a program to convert a binary number to its equivalent decimal.
19. Write a program to calculate  $x^n$  where x and n is integer.
20. Write a program to draw a line inside a circle.
21. Write a program to draw the flag of Bangladesh.
22. Write a program that reads a positive integer  $n$  and then prints a diamond of asterisks in  $2n-1$  rows. For example, if n is 4, then the output would be

```
      *
     ***
    *****
   *********
  *********
   *****
    ***
     *
```

**Saifur Rahaman**

Assistant Professor  
Dept. of CSE, IIUC

---

Last date of submission:

**Saifur Rahaman**  
Assistant Professor  
Dept. of CSE, IIUC