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EST 102 Programming in C - Lab Program List

Jyothi Engineering College, Cheruthuruthy, Thrissur, Kerala

Department of Computer Science & Engineering

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Programs by Alwin Mathew

GCC & GEANY Installation on Windows

Cycle 1

- 1. Familiarization of Hardware Components of a Computer
- 2. Familiarization of Linux Environment Linux Basic Commands
- 3. Write a C program to find the sum of two integer numbers.
- 4. Write a C program to find the area of a triangle.
- 5. Write a C program to find the area of a circle.
- 6. Write a C program to check whether a given integer number is odd or even.
- 7. Write a C program to find the largest of two integer numbers.
- 8. Write a C program to find the largest of three integer numbers.
- 9. Write a C program to convert Celsius to Fahrenheit.
- 10. Write a C program to find the power of a number.
- 11. Write a C program to swap two integer numbers.
- 12. Write a C program to implement a simple calculator using a switch case.
- 13. Write a C program to find the sum of first n natural numbers using a while loop.
- 14. Write a C program to find the sum of the digits of a given number using a do-while loop.
- 15. Write a C program to find the reverse of a number.
- 16. Write a C program to check whether a given number is palindrome or not.
- 17. Write a C program to find the factorial of a number using for loop.
- 18. Write a C program to check whether a given number is Armstrong or not.
- 19. Write a C program to print the Fibonacci series.
- 20. Write a C program to check whether a given number is prime or not.
- 21. Write a C program to check whether a given number is a perfect number or not.
- 22. Write a C program to check whether a given number is a strong number or not.
- 23. Write a C program to print Floyd's triangle.
- 24. Write a C program to check whether a given year is a leap year or not.
- 25. Write a C program to find the roots of a quadratic equation.
- 26. Write a C program to find the sum of the following series up to N terms (2+5+10+17+26+37+...+N)

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Cycle 2

- 27. Write a C program to find the average of 4 numbers using array.
- 28. Write a C program to implement linear search.
- 29. Write a C program to find the largest of N numbers.
- 30. Write a C program to find the smallest of N numbers.
- 31. Write a C program to implement bubble sort.
- 32. Write a C program to read and print a 2D matrix.
- 33. Write a C program to add 2 matrices.
- 34. Write a C program to multiply 2 matrices.
- 35. Write a C program to transpose a matrix.
- 36. Write a C program to find the length of a string (without using strlen function).
- 37. Write a C program to reverse a string (may use strlen from string.h)
- 38. Write a C program to check whether a given string is palindrome or not.
- 39. Write a C program to count the no of vowels in a string.
- 40. Write a C program to concatenate two strings (using streat function).
- 41. Write a C program to sort a set of words (use string handling functions strcmp and strcpy).

Cycle 3

- 42. Write a C program to add two numbers using a function.
- 43. Write a C program to find the largest of two numbers using function.
- 44. Write a C program to find the factorial of a number using a function.
- 45. Write a C program to find the sum of the digits of a number using a function.
- 46. Write a C program using the function to check whether a given number is prime or not.
- 47. Write a C program to check whether a given number is Strong or not using a nested function.[main()-->armstrong()-->factorial()]
- 48. Write a C program to find the largest number in an array using a function.
- 49. Write a C program using the function to add two matrices.
- 50. Write a C program to find the factorial of a number using recursion.
- 51. Write a C program to display the Fibonacci series using a recursive function.
- 52. Write a C program to find the sum of the digits of a number using a recursive function.
- 53. Write a C program to implement bubble sort using functions.

Cycle 4

- 54. Write a C program to store and print student details using structure.
- 55. Write a C program to create a structure containing the fields: Name, Price, Quantity, and Total amount. Use separate functions to read and print data.
- 56. Write a C program to find the sum of all elements in an array using pointers.
- 57. Write a C program to find the largest of two numbers using pointers.
- 58. Write a C program to swap two numbers using pointers(use call by address/reference/pointers parameter passing method)
- 59. Write a C program to find the largest of n numbers using pointers.
- 60. Write a C program to reverse a string using pointers.

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- 61. Write a C program to copy the content of one file to another file.
- 62. Write a C program to count the number of characters, words, and lines in a file.
- 63. Write a C program to read a set of numbers from a file named 'data.txt', then write all the 'odd' numbers to a file named 'odd.txt' & all 'even' numbers to a file named 'even.txt'

64. Write a C program to merge the contents of two files into a third file.