

List of Experiments

Part 1

1. Write a C program to print a block F using hash (#), where the F has a height of six characters and width of five and four characters
2. Write a C program that accepts two item's weight (floating points' values) and number of purchase (floating points' values) and calculate the average value of the items
3. Write a C program to swap two variables using a third variable
4. Write a C program to swap two variables without using a third variable
5. Write a C program to convert a given integer (in seconds) to hours, minutes, and seconds.
6. Write a C program to convert specified days into years, weeks, and days.
Note: Ignore leap year. Test Data: Number of days: 1329-3 years, 33 weeks and 3 days
7. Write a C program to check whether a number is even or odd.
8. Write a C program to check whether a given year is Leap year or not
9. Write a C program to check whether a triangle is Equilateral, scalene, or isosceles
10. Write a C program to check whether a triangle is right angles, obtuse, acute triangle
11. Write a C program to convert temperature from Fahrenheit to Celsius and Celsius to Fahrenheit (User must provide the choice of type of temperature)
12. Write a C program to check whether a character is an alphabet, digit
13. Write a C program a program to check whether an alphabet is a vowel or consonant
14. Write a C program to find smallest of two numbers
15. Write a C program to find largest of three numbers
16. Write a program in C to implement Simple Calculator.
17. WAP to calculate the root of a Quadratic Equation
18. WAP to accept a coordinate point in a XY coordinate system and determine in which quadrant the coordinate point lies.
19. Write a program to find gross salary of employee if DA is 40% of basic Salary and HRA is 20% of basic salary. Basic salary will be entered as input by keyboard.
20. Write a program in C to calculate and print the Electricity bill of a given customer. The customer id and unit consumed by the user should be taken from the keyboard and display the total amount to pay to the customer.
upto 199-----1.20
200-500-----1.80
Above 500-----2.00
If bill exceeds Rs. 400 then a surcharge of 15% will be charged and the minimum bill should be of Rs. 100/-
21. A library charges a fine for every book returned late. For first 5 days the fine is 50 paisa, for 6-10 days, fine is one rupee and above 10 days, fine is 5 rupees. If you return the book after 30 days your membership will be cancelled. Write a program to accept the number of days the member is late to return the book and display the fine or appropriate message.
22. Write a program to find the factorial of any number.
23. Write a program to print Fibonacci sequence 0 1 1 2 3 5 8 13..... N terms and prints the sum of sequence.
24. Write a program in C to accept an integer number and find sum of digits.
25. Write a program in C to accept an integer number and find reverse of this number and check this number for palindrome
26. Write a program in C to accept an integer number and to check a number is Armstrong or not
27. Write a program in C to accept an integer number and to check a number is Perfect or not

28. Write a program to find the sum of $S = 2+4+6+8+\dots+N$ terms.
29. Write a program to check a number whether it is prime number or not.
30. Write a program to find the sum of series $S=1 - 1/2 + 1/3 - 1/4 + 1/5 - \dots$ up to n terms.
31. Write a program to find the sum of series: $S = 1/1! + 2/2! + 3/3! + \dots$ 7 terms.
32. Write a program to convert binary number to decimal number.
33. Write a program to find the sum of series: $S = 14 + 34 + 54 + 74 + \dots$ 100 terms
34. Write a program in C to print the following pattern:

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*      *      *
*      *      *
*      *      *

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35. Write a program in C to print the following pattern:

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1
1    2
1    2    3

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36. Write a program in C to print the following pattern:

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      *
    * * *
  * * * * *

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37. Write a program in C to print the following pattern:

```

1
0    1
1    0    1
0    1    0    1
1    0    1    0    1

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38. Write a program to print all prime numbers \leq a given number.
39. Write a program to convert Decimal no to Binary No.
40. Write a program to find product, sum, average, max and min from a list of n numbers.
41. Write a program in C to display the index of smallest and largest element in 10 integers
42. Write a program in C to display the index of smallest and largest element in 3 X 4 matrix of integers.
43. Write a program in C that accepts N*N matrix as input and print transpose of this matrix
44. Write a program to accept two matrices of some order. (Order must be given by user) find out the sum of these matrices and print the sum of matrices.
45. Write a program to find out the product/Multiplication of two matrices and print the product matrix. (order of matrices must be given by user)
46. Write a program to accept two matrices of some order. (Order must be given by user) find out the subtraction of these matrices and print the sum of matrices.
47. Write a C Program to implement Simple Calculator (Addition, Subtraction, Multiplication, Division) using the concept of function
48. Write a C Program to swap two values using function
49. Write a C Program to Calculate the factorial of a number using function
50. Write a C Program to Calculate the factorial of a number using recursion