

Unit 1: C language basic programs list.

1. print your name with printf().
2. print your resume with printf().
3. use \n and \t
4. print pattern with \n and \t
5. print formatted design with printf()
6. print integer variable
7. print sum of two values
8. scan integer value from user
9. scan multiple values in single scanf()
10. make sum of two values, values must get from keyboard.
11. demonstrate range of integer.
12. demonstrate range of long integer.
13. create character variable and print it.
14. W.A.P. to demonstrate sizeof operator.
15. W.A.P. to print ASCII of any character.
16. get character with getch() and print it.
17. create float variable scan float values and print it.
18. swap two values with use of third variable.
19. swap two values without use of third variable.
20. W.A.P. to find simple interest.
21. create result with 5 subject.
22. demonstrate increment operator.
23. demonstrate decrement operator.
24. find maximum out of two with ternary operator.
25. find maximum out of three with ternary operator.
26. demonstrate define keyword.
27. define string and print it.
28. demonstrate const keyword.
29. demonstrate arithmetic operators.
30. Convert kilometer in meters.
31. Create light bill with unit amount and border pattern.
32. Demonstrate variable type casting.
33. Demonstrate limitation in decimal points in float values.
34. Demonstrate printable size of any values.
35. W.A.P. Print on specific location of screen.
36. Calculate square of entered value.
37. Calculate cube of entered value.
38. Find average of three numbers.
39. W.A.P. to print ASCII of Entered Number.
40. W.A.P. to print Character of Entered ASCII.
41. W.A.P. to demonstrate lvalue error.
42. Demonstrate compound assignment operators.
43. Convert character in integer by type casting.
44. Demonstrate how to create and initialize values.
45. Get single character from user and print ASCII of That Character.
46. Find area of circle.
47. Demonstrate local scope of variable.

48. Demonstrate global scope of variable.
49. Demonstrate type promotion.
50. W.A.P. to convert Celsius to Fahrenheit.

Unit 2: C language programs for conditional statements and loops.

1. Check Entered number is greater than five or not.
2. Check entered number is zero or not.
3. Check entered number is odd or even.
4. Check entered year is leap year or not.
5. Check entered number is between 0 to 100 or not.
6. Check entered character is vowel or not.
7. Check entered number is positive or negative.
8. Find maximum out of two numbers.
9. Find minimum out of two numbers.
10. Enter purchase price and sale price and check amount of profit / loss.
11. Create result and check student is pass or not and also print grade.
12. Check entered both number are same or not.
13. Check number is divided by 3 or not.
14. Find maximum out of three values (nested if)
15. Find maximum out of three values (leader if)
16. W.A.P. to Generate light bill.
17. W.A.P. to find income tax.
18. W.A.P to check both values are same or not.
19. Create switch case to print 1, 2, 3 as per user entered the number.
20. Create switch case to print number in text according to entered number.
21. Create switch case to print month name as per month number entered.
22. Perform arithmetic operation as per user select the options.
23. Print appropriate season name as user enter the month number.
24. Print 1 to 10 with while loop.
25. Print all odd numbers between 0 to 100 with while loop.
26. Print all even number between 0 to 100 with while loop.
27. Print sum of 1 to 10 with while loop.
28. Get 10 values from keyboard and Make sum with while loop.
29. Get 10 values from keyboard and find maximum with while loop.
30. Print following pattern with while loop
 - a. 1 10 2 9 3 8 4 7 5 6 6 5 7 4 8 3 9 2 10 1
31. Print table of given number with while loop.
32. Print uppercase alphabets with while loop.
33. Print lowercase alphabets with while loop.
34. Print numbers as per user give the range.
35. Print 1 to 10 with do while loop.
36. Prove how to do while loop run once.
37. Print 10 to 0 with do while loop.
38. Print following pattern with do while loop.
 - a. 1 3 5 7 9 11 13 15 17
39. Print 1 to 100 with for loop
40. Print all the even numbers between 0 to 100 with for loop.
41. Print lowercase alphabets with for loop.
42. Print table of given number with for loop.

43. Print following pattern with for loop.

| | | |
|---|---|---|
| ***** ***** ***** ***** ***** | ***** ***** ***** ***** ***** | * ** *** **** ***** |
| * ** *** **** ***** | 1 12 123 1234 12345 | 1 22 333 4444 55555 |
| 1 10 101 1010 10101 | A AB ABC ABCD ABCDE | A BB CCC DDDD EEEE |
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | A B C D E F G H I J K L M N O | A BAB CBABC DCBABCD EDCBABCDE |
| 1 123 12345 1234567 1234566789 | 1 212 32123 4321234 543212345 | 1 121 12321 1234321 123454321 |

44. Find entered number is palindrome or not.
45. Find entered number is Armstrong or not.
46. Find entered number is factorial or not.
47. Find entered number is prime or not.
48. Print Fibonacci series.
49. Demonstrate break statement with loop.
50. Demonstrate continue keyword with loop.
51. Print all odd numbers between 0 to 100 with continue keyword.
52. Count all how many digits is entered number.
53. Print entered number in reverse order.
54. Find compound interest with for loop.
55. Demonstrate infinite loop.
56. For loop without increment or decrement.
57. For loop with multiple increment or decrement
58. Run loop until user enter 0.
59. Make sum of entered values until user enter 0.
60. Find maximum out of n values entered from user.

Unit 3: C language programs for arrays.

1. Create integer array with 5 elements.
2. Print size of array.
3. Initlize integer array and print it.
4. Store values on different element of array and make sum of all elements.
5. Create integer array with 10 elements and print it with for loop.
6. Print array in reverse order.
7. Create integer array with 10 elements and make sum of all.
8. Copy all element of array in another element.
9. Enter 10 values in array and print average value of array.
10. Store 10 values in array and find maximum.
11. Check entered number is existing or not in array.
12. Create two integer array with 5 elements make sum of both array and store in third array.
13. Sort integer array in ascending order.
14. Sort integer array in descending order.
15. Crete two-dimension array and print size of the array.
16. Create two-dimension array and print all the elements.
17. Initlize two-dimension array.
18. Check entered number is existing or not in two-dimensional array.
19. Sort two-dimensional array in ascending order.
20. Find maximum value out of two-dimensional array.
21. Create character array and print size of it.
22. Store string on character array.
23. Get string in character array with gets() and print it.
24. Print all the character of string separate by space.
25. Find how many vowels in strings.
26. W.A.P. to separate odd and even values in two different arrays.
27. Find non repeated values from array.
28. Create three-dimension array and print it.
29. Make sum of three-dimension array.
30. Sort character array in ascending order.

Unit 4: C language programs for functions (library and UDF).

1. Get single character with `getch()` and print it.
2. Get single character with `getche()` and print it
3. Get string from user with `gets` function and print with `puts` function.
4. Get length of string with `string` function.
5. Print entered string in reverse order.
6. Print entered string in lower case.
7. Print entered string in upper case.
8. Copy entered string in another string.
9. Print difference between two string with `strcmp` function.
10. Find entered string is palindrome or not.
11. Create sub string from entered string with `strstr` function.
12. Find entered character is alphabet or not.
13. Find entered character is digit or not.
14. Find entered character is space or not.
15. Find entered character is in uppercase or not.
16. Find entered character is in lowercase or not.
17. Find entered character is alpha numeric or not.
18. Convert entered character in lowercase.
19. Convert entered character in uppercase.
20. Find entered character is punctuator or not.
21. Find absolute number of entered number.
22. Find ceil of entered float number.
23. Find exponent of entered number.
24. Find floor of entered number.
25. Find power of entered numbers.
26. Find sqrt of entered number.
27. Create UDF to print simple patter.
28. Demonstrate UDF no parameters no return values.
29. Demonstrate UDF with parameters no return values.
30. Demonstrate UDF no parameters with return values.
31. Demonstrate UDF with parameters with return values.
32. Create UDF for print greeting messages (good morning, good evening, good night).
33. Create own header file with math functions (sum, sub, min, max, mul, div, mod).
34. Create banking application with balance inquiry, deposit withdrawal UDF functions.
35. Create UDF function to check both string are same or not.
36. Create UDF to check entered number is positive or not.
37. Create UDF to find maximum out of three values.
38. Create UDF to find square of entered number.
39. Create UDF to find cube of entered number.
40. Create UDF to check how many vowels in entered string.
41. Create UDF to check entered email contains @ and . sign or not.
42. Create UDF to count how many words in entered string.
43. Create UDF to count how many special characters in entered string.
44. Create UDF to count how many digits in entered string.
45. Create UDF to count how many characters in entered string.
46. Create UDF to find entered number is odd or even.

47. Create UDF to find entered number is palindrome or not.
48. Demonstrate random () and print 10 random values.
49. Demonstrate delay function in for loop.
50. Create UDF to convert entered string in lower case.

Unit 5: C language pointer, enum, structure, union, graphics programs list.

1. W.A.P. to print address of any variable.
2. W.A.P. to print size of integer pointer variable.
3. W.A.P. to Store addresses of integer variable in integer pointer and print it.
4. Change the value of integer variable with pointer variable.
5. Create integer array and print all the elements with pointer.
6. Create character array and print the string with character pointer.
7. W.A.P. to use of double pointer.
8. W.A.P. to pointer with increment and decrement operators.
9. W.A.P. to swap two values with call by value method.
10. W.A.P. to swap two values with call by reference method.
11. Create enumeration data type and store name of months.
12. Create enumeration and store values on variable.
13. Create structure to store student data (name, city, age) and print size of structure.
14. Create structure to store student data (name, city, age) and assign values to it.
15. Demonstrate copy structure. (structure to structure)
16. Demonstrate copy structure (member to member)
17. Create structure for store details of employee and get values from user also print these values.
18. Create structure for store dimension of box and find area.
19. Demonstrate size of union.
20. Create union for store dimension of box and find area.
21. Create program in c graphics to draw line.
22. Create program in c graphics to draw circle.
23. Create program in c graphics to draw rectangle.
24. Create program in c graphics to draw arc.
25. Create program in c graphics to polygon.
26. Create program in c graphics to bar.
27. Create program in c graphics to 3d bar.
28. Create program in c graphics to ellipse.
29. Create program in c graphics to print maximum x and maximum y.
30. Create program in c graphics to draw star with lines.
31. Create program in c graphics to draw star with polygon.
32. Create program in c graphics to 100 circles with loop.
33. Create program in c graphics to draw circle in center of screen with $y / 2$ radius.
34. Create program in c graphics to demonstrate delay function.
35. Create program in c graphics to draw boat with lines.
36. Create program in c graphics to draw smiley face.
37. Create program in c graphics to draw house with lines and rectangle.
38. Create program in c graphics to generate circles from all sides of screen.
39. Create program in c graphics to draw arc in loop with various radius.
40. Create program in c graphics to draw circle with random colors.
41. Create program in c graphics to put pixels with random location and color.
42. Create program in c graphics to draw national flag.
43. Create program in c graphics to draw bricks.
44. Create program in c graphics to draw

