

1. Write an example to explain the syntax of declaring a 2-dimensional array.
2. Write a C program to multiply two matrices (2-dimensional 3x3 matrices)
3. Array is a sequential data access. Justify the statement.
4. Write a function to test whether a given string is palindrome or not. Function should receive a string and return 1 if it is a palindrome else returns 0. Also write the main function.
5. Define Array.
6. Give the syntax and one example each of the following string handling functions:
 - a. strlen()
 - b. strcpy()
 - c. strcat()
 - d. strcmp()
7. Write a C program to calculate the trace of a matrix. [Trace of a matrix is defined as the sum of the main diagonal elements.]
8. What are arrays? Explain how they simplify programming with suitable example.
9. Write a program to multiply two matrices and print the result in matrix form.
10. Give the difference between a character and a string.
11. Write a C program for reading a name and display each character of the name in individual rows in reverse order. For eg. RAMAN
Output:
N
A
M
A
R
12. What is an array? Explain.
13. Define array.
14. What is an array? How does it differ from the ordinary variable?
15. Write the definition of all given functions:
 - a. strlen()
 - b. strcpy()
 - c. strcat()
 - d. strcmp()
 - e. strlen()
 - f. strupr()
 - g. strrev()
16. What is Array?
17. What is character array? How is it different from other data types of array?
18. Write a program to read a two dimensional array and find sum of elements for each row and each column.
19. Array is sequential data access. Justify the statement.
20. Define C array. Write format for declaring an array.
21. Write a C program to multiply two matrices by using 2 dimensional arrays.
22. Define row major and column major.

23. Write a program to enter any element and find whether that element is present in the array or not by using binary search.
24. What is an Array? Explain.
25. Write a program to input a 4x4 matrix by the user. Test and print whether the matrix is symmetric or not.
26. Write and explain 7 string manipulation functions.
27. What is the difference between string and character array?