Academic Year 2023-24

IA-II Question Bank

Subject: C- Programming   Semester: II

1. Differentiate between structure and union.
2. Write a program in C to find the average of N elements entered by a user using an array.
3. Write a program to store information of 10 students using structures. Information includes roll, name, marks of students.
4. Explain nested structure with examples
5. Create Structure Patient having ID, patient name and disease name as data member. WAP to read the details of 10 patients and print details of those patients having 'diabetes'.

6. Write a program to check whether a square matrix is symmetric or not.
7. Write a program to accept a string from the user and check whether the string is palindrome or not without using the inbuilt string function..
8. Explain following function with proper example:-
   strrev(), strcmp().gets(),strcpy,strlen(), 2 library functions of math.h.
9. Explain compile time and runtime initialization of arrays with proper examples
10. Define array? Explain the static and dynamic initialization of the 1D array.
11. WAP to find the sum of even elements present in an array.
12. What is an array? what an array name signifies. Can array index be negative?
13. What is a string? WAP that will read a word and rewrite it in alphabetical order.
14. Write a program to perform matrix multiplication by passing input matrix to the function and printing the resultant matrix.
15. WAP to find the average of N elements entered by a user using an array.
16. WAP to find the transpose of a matrix using only one matrix.

17. Explain pointers with examples. How an array is related to a pointer.
18. How do pointers differ from variables in C. Write a program to add 2 pointers.
19. Write a program to find a factorial of a given number using call by reference.
20. Explain the Dynamic memory allocation.
21. Write a note on pointer initialization and dereferencing of pointer.
22. Write a program to calculate the sum of series
    x-x/2!+x/3!-x/4!.....x/n
23. WAP to convert decimal numbers into any base.