

Important Questions

Chapter – 1 Introduction to computer and programming

1. List out types of software with Examples.
2. Categorize the major components of computer system and give their function.

Chapter – 2 Fundamentals of C

1. Define: algorithm, flowchart, compiler.
2. Show the important of stdio.h header file.
3. Define algorithm and explain different symbols used in flowchart.
4. Develop an algorithm to print first N Fibonacci numbers.
5. Write flowchart or algorithm to find area of a triangle.
6. What are header files? Name at least 3 with its usage.
7. List all operators used in C and explain any three with example.
8. Draw all symbols used in flowchart and draw flowchart to find factorial number.
9. Describe local and global variable with example.
10. Describe precedence and associativity of operators with example.
11. What do you mean by type conversion? Give example.
12. What is formatted output? Using printf() statement explain it.
13. Distinguish the data types provided by C programming language.
14. Explain different types of constants.
15. Implement a C Program to convert temperature from Fahrenheit to Celsius and vice versa.
16. Demonstrate a C program to input an integer number and check last digit of number is even or odd.
17. Explain getch(), getchar(), gets().
18. List out the operators used in C language and explain any three with example

Chapter – 3 Control structure in C

1. Explain while loop with example.
2. Explain for loop with example.
3. Explain break and continue statement with example.
4. Explain various looping control structures with suitable example.
5. Write a C program to input an integer number and check last digit of number is even or odd.
6. Define general form of 1) do while loop 2) Nested if 3) goto.
7. Explain switch case statement with example to read number between 1 to 7 and print relatively day Sunday to Saturday.
8. Write a program to reverse a given number.
9. Write a program to find $1+1/2+1/3+1/4+\dots+1/n$.
10. Write a program to check whether entered character is vowel or not?
11. Construct 'C' program to print the following pattern using loop statement.
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
12. Write a program to find sum of first N odd numbers. Ex. $1+3+5+7+\dots+N$

Chapter – 4 Array & String

1. Why null value is used in string? Justify your answer with example
2. Describe array with example.
3. What is string? Explain with example to find a character from string.
4. What is a string? Explain at least 4 built-in string functions with example.
5. What is an array? Explain one dimensional and two dimensional array declarations and initialization with suitable example.

6. Write a program to print all Armstrong numbers in a given range. Armstrong number is equal to sum of cubes of its individual digits. For example $153 = 1^3 + 5^3 + 3^3$. So, 153 is Armstrong number.
7. Write a C program to read 10 numbers from user and store them in an array. Display Sum, Minimum and Average of the numbers
8. Write a program to display transpose of given 3×3 matrix.
9. What are command line arguments? Explain with suitable example.

Chapter – 5 Functions

1. What is UDF? Describe advantages of UDF.
2. Classification of User defined function's components (elements).
3. Discuss parameter passing technique used in C with example.
4. Create a function to swap the values of two variables.
5. In user defined function, what is actual argument and formal argument?
6. Explain call by value (pass by value) and call by reference (pass by reference) with examples in brief.
7. Explain the function definition, function prototype and function call with relative example.

Chapter – 6 Recursion

1. Define recursion. List the advantages of recursion.
2. Create a function to check number is prime or not. If number is prime then function return value 1 otherwise return 0.
3. Write a program to calculate nCr using user defined function. $nCr = n! / (r! * (n-r)!)$
4. What is recursive function? Explain with suitable example.
5. What care must be taken while writing a program with recursive function?

Chapter – 7 Pointers

1. What is pointer? Explain with example to print the address of variable using pointer.
2. What is pointer? Which arithmetic operations are not valid on pointers?
3. Explain array of pointers with suitable example.
4. What is pointer? Which arithmetic operations are valid on pointers?
5. What is pointer to pointer? Write suitable example to demonstrate the concept.

Chapter- 8 Structure

1. Explain with suitable example structure variable and pointer to structure variable.
2. Define a structure data type called time_struct containing three member's integer hours, minutes, second. Develop a program that would assign values to individual member and display the time in following format : HH:MM:SS.
3. What is structure? How to access the elements of structure? How to calculate size of structure? Explain with example.
4. Explain how structure variable is initialized with suitable example.
5. Distinguish between Structure and Union.

Chapter-9 Dynamic Memory Allocation

1. What is dynamic memory allocation? Explain important functions associated with it.

Chapter-10 File Management

1. Explain fopen() and its mode with example to write a string into file.
2. Describe file management. And List the various file management functions.
3. Write a program to illustrate the use of fputc () and fputs()