**C Language Questions**

1. What is the size of a float in C?

2. Which operator is used to compare equality in C?  
A) = B) == C) != D) :=

3. What will be the output of: printf("%d", 6 % 4);

4. What is the default value of an uninitialized local variable in C?

5. Which keyword is used to define a constant in C?

6. Write one-line syntax of a for loop in C.

7. Which of the following is a logical AND operator?  
A) & B) && C) | D) ||

8. What will this code print?

int x = 10;

if (x > 5) printf("A"); else printf("B");

9. Which loop is guaranteed to execute at least once?

10. What does the break statement do inside a loop?

11. What is the return type of main() function in standard C?

12. Can a function return more than one value? (Yes/No)

13. Write the syntax to declare an array of 5 integers.

14. What is the index of the last element in int arr[5];?

15. Can we use a loop inside a function? (Yes/No)

**Instructions:** Write complete C programs for the following tasks.

1. Write a program to input two numbers and print their sum, difference, multiplication, and division.
2. Write a program to check whether a number is even or odd using if-else.
3. Write a program to find the maximum of three numbers using nested if-else.
4. Write a program that prints numbers from 1 to 50 using a for loop.
5. Write a program to calculate the factorial of a number using a while loop.
6. Write a program to input 5 numbers into an array and print the sum of all numbers.
7. Write a program to reverse and print the elements of a 5-element array.
8. Write a function int square(int num) that returns the square of a number. Call this function from main().
9. Write a program to input a number and check whether it is positive, negative, or zero using if-else.
10. Write a program using switch to perform a basic calculator (addition, subtraction, multiplication, division) based on user choice.