

# C Programming Question Paper

1. Write a C program to calculate the sum of the first N natural numbers using a while loop.
2. Write a C program to input the age of a person and check if they are eligible to vote (age  $\geq 18$ ).
3. Write a C program to print the multiplication table for a user-input number.

*Example format:*

If the input is n = 2;

2 x 1 = 2

2 x 2 = 4

...

2 x 10 = 20

4. Write a C program to assign grades based on marks using the following criteria: 90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, below 60 = Fail.
5. Write a C program to calculate the factorial of a given number.
6. Write a C program to check if a number is a palindrome using a while loop
7. **Write a C program to check if a voter is valid to vote or not.**  
(For example, if the voter is 18 years or older, they are eligible to vote.)
8. Write a C program to find the sum of digits of a given number.
9. Write a C program to print the first N Fibonacci numbers using a for loop.
10. Write a C program to print all prime numbers between 1 and n (n = user input).
11. Write a function in C to calculate the sum of the digits of a number.

12. Write a C program to print the following pattern when n = 4:

1 2 3 4

5 6 7 8

9 10 11 12

13 14 15 16

13. Write a function in C to find the greatest of three numbers.

14. Write a C program to print the following pattern when  $n = 6$ :

```
      1
     2 2
    3   3
   4     4
  5       5
 6 5 4 3 2 1 2 3 4 5 6
```