

Rohit Roy

Number Programs for Absolute Beginners :

LEVEL 1 →

1. WAP in C/ C++/ java to perform the following tasks :
 - a. Accept two numbers from the user(a and b).
 - b. Print the numbers.
 - c. Print the smallest number.
 - d. Calculate their :
 - i. Summation (a+b)
 - ii. Subtract them (a-b)
 - iii. Multiply them (a*b)
 - iv. Divide them (a/b – quotient)
 - v. Remainder (a%b)
 - vi. Square root of each numbers.
2. WAP in C/ C++/ java to print the **even** numbers between M and N (0> M,N <100)
3. WAP in C/ C++/ java to find the suffix of the given number.

Example,

Inputs	Outputs
1	st
2	nd
3	rd
11	th
21	st
22	nd
23	rd

4. WAP in C/ C++/ java to divide two integers (dividend and divisor)

Example,

Dividend = 7
 Divisor = 2
 Result = 3

Dividend = -17
 Divisor = 5
 Result = -3

5. WAP in C/ C++/ java to generate **prime** numbers between M and N ($0 < M, N < 1000$)
6. WAP in C/ C++/ java to find the **factorial** of the number.

For example:

$$1! = 1$$

$$2! = 2 \times 1 = 2$$

$$3! = 3 \times 2 \times 1 = 6$$

$$4! = 4 \times 3 \times 2 \times 1 = 24$$

$$5! = 5 \times 4 \times 3 \times 2 \times 1 = 120$$

$$6! = 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 720$$

$$7! = 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 5,040$$

$$8! = 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 40,320$$

$$9! = 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 362,880$$

$$10! = 10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 3,628,800$$

7. WAP in C/ C++/ java to find sum of the digits of the number.

Example, Input : 123, Output : 6 [expl. $1+2+3$]

8. WAP in C/ C++/ java to check whether the numbers is a **Neon number** or not.

Input : 9

Output : Neon Number

Explanation: square is $9 \times 9 = 81$ and sum of the digits of the square ($8+1$) is 9.

Input : 12

Output : Not a Neon Number

Explanation: square is $12 \times 12 = 144$ and sum of the digits of the square is 9 ($1 + 4 + 4$) which is not equal to 12.

9. WAP in C/ C++/ java to check whether the numbers is a **Special Number** or not.

Definition : If the sum of the factorial of digits of a number (N) is equal to the number itself, the number (N) is called a **special** number.

INPUT : **145** The digits of the number are: **1, 4, 5**

Factorial of digits:

$$1! = 1$$

$$4! = 4 \times 3 \times 2 \times 1 = 24$$

$$5! = 5 \times 4 \times 3 \times 2 \times 1 = 120$$

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Sum of factorial of digits = $1 + 24 + 120 = 145$

Hence, the given number **145** is a **special** number.

10. WAP in C/ C++/ java to check whether a number is a **Harshad Number** or not.

In recreational mathematics, a Harshad number in a given number base is an integer that is divisible by the sum of its digits when written in that base.

Example: Number 200 is a Harshad Number because the sum of digits 2 and 0 and 0 is $2(2+0+0)$ and 200 is divisible by 2. Number 171 is a Harshad Number because the sum of digits 1 and 7 and 1 is $9(1+7+1)$ and 171 is divisible by 9.

Input a number : 353

Expected Output : 353 is not a Harshad Number.