

=> Write a c program to find first and last digit of a number.

```
#include <stdio.h>
int main() {
    int n, first, last;
    printf("Enter a number: ");
    scanf("%d", &n);
    last = n % 10;
    while (n >= 10) {
        n /= 10;
        first = n;
    }
    printf("First digit = %d\nLast digit = %d\n", first, last);
    return 0;
}
```

Output :

```
Enter a number: 7642
First digit = 7
Last digit = 2
```

=> Find the given number is prime number or not

```
#include <stdio.h>
int main() {
    int num, i, isPrime = 1;
    // input from user
    printf("Enter a number:");
    scanf("%d", &num);
    // 0 and 1 are not prime numbers
    if(num <= 1) {
        isPrime = 0;
    } else {
        // check divisibility from 2 to num/2
        for(i=2; i <= num/2; i++) {
            if(num % i == 0) {
                isPrime = 0;
                break;
            }
        }
        // output result
        if(isPrime)
            printf("%d is a prime number.\n", num);
        else
            printf("%d is not a prime number.\n", num);
    }
}
```

Output :

Enter a number : 764
764 is not a prime number.

=> Find the factorial of a given number

```
#include<stdio.h>
int main() {
    int n,i;
    long long fact=1;
    printf("Enter a number:");
    scanf("%d",&n);
    if(n<0)
        printf("Factorial not defined for negative numbers.\n");
    else {
        for(i=1;i<=n;i++)
            fact *= i;
        printf("Factorial of %d=%ld\n",n,fact);
    }
    return 0;
}
```

Output :

Enter a number : 4

Factorial of 4 = 24

=> Print the given number is strong number or not

```
#include<stdio.h>
```

```
//function to calculate factorial of a number
```

```
int factorial(int n) {
```

```
    int fact = 1;
```

```
    for (int i = 1; i <= n; i++) {
```

```
        fact *= i;
```

```
}
```

```
    return fact;
```

```
}
```

```
int main() {
```

```
    int num, temp, remainder, sum = 0;
```

```
//input a number from user
```

```
printf("Enter a number:");
```

```
scanf("%d", &num);
```

```
temp = num;
```

// calculate sum of factorials of digits

```
while (temp > 0) {
```

```
    remainder = temp % 10;
```

```
    sum += factorial(remainder);
```

```
    temp /= 10; }
```

```
// check if the number is strong or not
```

```
if (sum == num)
```

```
    printf("%d is a strong Number.\n", num);
```

```
else
```

```
    printf("%d is not a strong number.\n", num);
```

```
return 0; }
```

Output :

Enter a number: 654

654 is not a prime number

=> Find sum of all digits in a number.

```
#include <stdio.h>
```

```
int main() {
```

```
    int n, sum=0, rem;
```

```
    printf("Enter a number : ");
```

```
    scanf("%d", &n);
```

```
    while(n>0) {
```

```
        rem=n%10;
```

```
        sum=sum+rem;
```

```
        n=n/10;
```

```
}
```

```
printf("sum of all digits = %d ", sum);
```

```
return 0;
```

```
}
```

Output :-

Enter a number: 1234

sum of all digits = 10.