

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

Output:

The first digit of 12345 is 1
The last digit of 12345 is 5

2) #include <stdio.h>

```
int main () {
    int n;
    unsigned long long factorial = 1;
    printf ("Enter a number:");
    scanf ("%d", &n);
    if (n < 0) {
        printf ("factorial is not defined for negative numbers.\n");
    } else {
        for (int i = 1; i <= n; ++i) {
            factorial *= i;
        }
    }
}
```

```
    printf ("Factorial of %.d = %lu\n", n, factorial);
}
return 0;
}
```

Output:

Enter a number : 5

factorial of 5 = 120

3)

```
#include <stdio.h>
int main () {
    int n, i, isPrime = 1;
    printf ("Enter a number :");
    scanf ("%d", &n);
    if (n <= 1) {
        isPrime = 0;
    } else {
        for (i = 2; i * i <= n; i++) {
            if (n % i == 0) {
                isPrime = 0;
                break;
            }
        }
    }
    if (isPrime)
        printf ("%d is a prime number.\n", n);
    else
        printf ("%d is not a prime number.\n", n);
}
return 0;
}
```

Output:

Enter a number : 7

7 is a prime number.

Enter a number : 12

12 is not a prime number.

4.

```
include <stdio.h>
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;
    printf ("Enter a number: ");
    scanf ("%d", &num);
    temp = num;
    while (temp > 0){
        remainder = temp % 10;
        sum += factorial (remainder);
        temp /= 10;
    }
    if (sum == num)
        printf ("%d is a strong number.\n", num);
    else
        printf ("%d is not strong number.\n", num);
    return 0;
}
```

Out Put

Enter a number : 145

145 is a strong number.

Enter a number : 123

123 is not a strong number.

5. #include <stdio.h>

```
int main(){
    int num, sum = 0, remainder;
    printf ("Enter a number:");
    scanf ("%d", &num);
    int temp = num;
    while (temp != 0){
        remainder = temp % 10;
        sum += remainder;
        temp /= 10;
    }
```

```
printf ("Sum of digits of %.d = %.d\n", num, sum);
return 0;
```

```
}
```

Output

Enter a number : 12345

Sum of digits of 12345 = 15