

i) find the first and last digits of a number.

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

Output:

Enter a number : 12345

First digit : 1

Last digit : 5

The first digit is 1 and last digit is 5

② write the C code to calculate the factorial.

```
#include <stdio.h>
int main() {
    int n, i;
    long long factorial = 1;
    printf("enter a number : ");
    scanf("%d", &n);
    if (n < 0) {
        printf("factorial of a negative number doesn't exist.\n");
    } else {
        for (i = 1; i <= n; ++i) {
            factorial *= i;
        }
    }
}
```

```
printf ("Factorial of %d = %.1d\n", n, factorial);
return 0;
}
```

Output:

Enter a number : 5

Factorial of 5 = 120

3) Check whether a number is prime or not

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

```
int main() {
```

```
    int n, i, flag = 0;
```

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

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

```
    if (n <= 1)
```

```
        flag = 1;
```

```
    for (i = 2; i <= n / 2; i++) {
```

```
        if (n % i == 0) {
```

```
            flag = 1;
```

```
            break;
```

```
}
```

```
}
```

```
    if (flag == 0)
```

```
        printf ("%d is a prime number\n", n);
```

```
    else
```

```
        printf ("%d is not a prime number\n", n);
```

```
    return 0;
```

```
}
```

Output:

Enter a number: 9

9 is a prime number

ii) check whether a number is a strong number or NOT

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

```
int main() {
```

```
    int num, temp, rem, fact, i, sum = 0;
```

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

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

```
    temp = num;
```

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

```
        rem = temp % 10;
```

```
        fact = 1;
```

```
        for (i = 1; i <= rem; i++)
```

```
            fact *= i;
```

```
        sum += fact;
```

```
        temp /= 10;
```

```
}
```

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

```
    printf("%d is a strong number : (%d", num);
```

```
else
```

```
    printf("%d is not a strong number : (%d", num);
```

```
return 0;
```

```
}
```

Output:

Enter a number : 145

145 is a strong number.

5) Find the sum of all digits in a number.

```
// include < stdio.h>
```

```
int main() {
```

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

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

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

```
    while (num > 0) {
```

```
        rem = num % 10;
```

```
        sum += rem;
```

```
        num /= 10;
```

```
}
```

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

```
    return 0;
```

```
}
```

Output:

Enter a number : 1234

Sum of digits = 10