

## 1) Write a c program to find first and last digit of a number?

**Input**

```
#include <stdio.h>

int main() {
    int num,first,last;scanf("%d",&num);
    last = num%10;
    first = num;
    while(first>=10){
        first = first/10;
    }
    printf("first and last number of a digit %d %d\n",first,last);

    return 0;
}
```

**Output**

```
2009
first and last number of a digit 2 9
...Program finished with exit code 0
```

## 2) Find the factorial of a given number

**Input**

```
#include <stdio.h>

int main() {
    int num, i;
    unsigned long long factorial = 1;
    printf("enter a number: ");
    scanf("%d", &num);
    if (num < 0) {
```

```
    printf("factorial does not exist for negative numbers. \n ");
} else {
    for (i = 1; i <= num; i++) {
        factorial *= i;
    }
    printf("factorial of %d is: %11u\n", num, factorial);
}
return 0;
}
```

### output

enter a number: 9

factorial of 9 is: 362880

...Program finished with exit code 0

### 3) Find the given number is a prime number or not

#### Input

```
#include <stdio.h>

int main() {
    int num, i, isprime = 1;
    printf("enter a number: ");
    scanf("%d", &num);
    if (num <= 1) {
        isprime = 0;
    } else {
        for (i = 2; i <= num; i++) {
            if (num % i == 0) {
                isprime = 0;
            }
        }
    }
}
```

```
    }
    if (isprime)
        printf("%d is a prime number.\n",num);
    else
        printf("%d is not a prime number.\n", num);
    return 0;
}
```

**output**

enter a number: 72

72 is not a prime number.

enter a number: 107

107 is a prime number.

**4)Print the given is strong number or not**

**Input**

```
#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, digit, sum = 0;
    printf("Enter a number: ");
    scanf("%d", &num);
```

```

temp = num;

while(temp > 0) {

    digit = temp % 10;

    sum += factorial(digit);

    temp /= 10;

}

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: 145

145 is a Strong Number.

Enter a number: 123

123 is NOT a Strong Number.

```

**5)Find sum of all digits in a number**

**Input**

```

#include <stdio.h>

int main() {

    int num, sum = 0, temp, digit;

    printf("Enter a number: ");

    scanf("%d", &num);

    temp = num;

```

```
while(temp > 0) {  
    digit = temp % 10;  
    sum += digit;  
    temp /= 10;  
}  
  
printf("Sum of digits of %d is %d\n", num, sum);  
return 0;  
}
```

**output**

Enter a number: 1976

Sum of digits of 1976 is 23