

```

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;
}

```

Out Put;

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 = %llu\n", n, factorial);
}
return 0;
}

```

Out Put:-

Enter a number : 5

factorial of 5 = 120

3)

```

#include <stdio.h>

```

```

int main () {

```

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    int n, i, isPrime = 1;

```

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    printf ("Enter a number : ");

```

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    scanf ("%d", &n);

```

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    if (n <= 1) {

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        isPrime = 0;

```

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    } else {

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        for (i = 2; i * i <= n; i++) {

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            if (n % i == 0) {

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```

                isPrime = 0;

```

```

                break;

```

```

            }

```

```

        }

```

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    }

```

```

    if (isPrime)

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

```

```

    else

```

```

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

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    return 0;

```

```

}

```

Out Put:-

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;

}

out put

Enter a number : 12345

Sum of digits of 12345 = 15