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

Input 12345
output
first-digit = 1.
last-digit = 5.

2.
```c
#Include < stdio.h>
int main (){
int n,i;
using unsigned 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 = factorial *i ;
}
printf (" factorial of %.d = %.llu\n", n, factorial);
}
return n;
```

Input 5
output:
factorial of 5 = 120.

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

Input : 7
output
7 is a prime number

4. #include<stdio.h>
#include < ctype.h>
#include < string.h>
```c
int main(){
    char input [100];
    int i, is number = 1;
    printf("Enter something: ");
    scanf("%s", input);
    for(i=0; i < strlen(input); i++){
```

```c
    if (! isdigit(input[i])){
        if number = 0;
        break;
    }
}
if (is number)
    printf(" the given input is a number.\ n");
else
    printf(" the given input is a string (not a number).\ n");
return 0;
}
```

Input: 12345
output: the given input is a number.
Input: hello
output: the given input is a string (not a number)

5.
```c
# Include < stdio. h>
int main() {
    int num, sum = 0, digit;
    printf(" Enter a number:");
    scanf("%. d", & num);
    if (num < 0)
        num = ~ num;
    while (num > 0) {
        digit = num % 10;
        sum = sum + digit;
        num = num / 10;
    }
    printf(" sum of digits = %. d\n", sum);
    return 0;
}
```

Input: 1234
output
sum of digits = 10