# Assignment

=> Write a c program, to find first and last digit of a number,

=> find the factorial of a given number

=> find the given number is prime number or not

=> print the given number is strong number or not

=> find sum of all digits in a number.

=>
```
#include <stdio.h>
int main() {
int n, first, last;
Printf ("Enter a number :");
Scanf ("%d", &n);
last = n%10;
while (n>=10)
    n/=10;
first =n}
```

```c
Printf (" First digit = %d \n Last digit = %d \n", first, last);
return 0;
}
```

Output:- Enter a number : 7642

First digit = 7
Last digit = 2

```c
#include <stdio.h>
int main () {
int n,i;
long long fact = 1;
```

```c
Printf (" Enter a number: ");
Scanf ("%d", &n);
if (n<0)
Printf (" factorial not defined for negative numbers.\n");
else {
for (i=1; i<=n; i++)
fact *=i;
Printf (" Factorial of %d = %lld\n", n, fact);
}
return 0;
}
```

Output :-

Enter a number : 4
Factorial of 4 = 24

```c
=) #include <stdio.h>
int main() {
int num, i, is prime =1;
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)
 Printf ("%d is a prime number.\n", num);
 else
 Printf ("%d is not a prime number.\n",num);
 return 0;
}
```

Enter a number: 164

164 is not a prime number

```c
=) #include <stdio.h>
int main() {
int n, temp, rem, sum =0, fact;
printf (" Enter a number: ");
Scanf ("%d", &n);
temp =n;
while (n>0) {
 rem = n%10;
 switch (rem) {
```

```c
        Case 0 : fact = 1; break;
        Case 1 : fact = 1; break;
        case 2 : fact = 2; break;
        case 3 : fact = 6 ; break;
        case 4 : fact = 24; break;
        case 5 : fact = 120; break;
        case 6 : fact = 720 ; break;
        case 7 : fact = 5040; break;
        case 8 : fact = 40320; break;
        case 9 : fact = 362880; break;
        default : fact = 0;
    }
    Sum = Sum + fact;
    n = n/10;
    }
    if (Sum == temp)
    Printf ("%d is a strong number", temp);
    else
    Printf ("%d is not a strong number", temp);
    return 0;
}
```

output:-

Enter a number : 543

543 is not a strong number

Enter a number : 145

145 is a strong number

```c
⇒ #include <stdio.h>
int main() {
int n, Sum =0, rem;
Printf("Enter a number : ");
Scanf("%d", &n);
while (n >0) {
    rem = n%10;
    Sum = Sum+rem;
    n = n/10;
    }
Printf("Sum of all digits = %d", sum);
return 0;
}
```

**Output:**

Enter a number : 1234
Sum of all digits = 10.