

Program to print N natural number:

```
num=int(input("enter the value"))
```

```
i=1
```

```
while i<=num:
```

```
    print(i)
```

```
    i=i+1
```

Program to sum the N natural number:

```
num=int(input("enter the number"))
```

```
sum=0
```

```
i=1
```

```
while i<=num:
```

```
    sum=sum+i
```

```
    i=i+1
```

```
print("the sum of",num,"natural numbers is",sum)
```

Fibonacci Series Program using loop

```
num=int(input('enter the term'))
```

```
a=0
```

```
b=1
```

```
count=0
```

```
while(count<num):
```

```
    print(a)
```

```
    sum=a+b
```

```
    a=b
```

```
    b=sum
```

```
    count+=1
```

Factorial Using Loop Program

```
num=int(input("enter a number: "))
```

```
fact=1
```

```
for i in range(1,num+1):  
    fact = fact*i  
print("factorial of ", num, " is ", fact)
```

Armstrong number program

```
num=int(input("Enter a number: "))  
sum = 0  
temp = num  
while temp > 0:  
    digit = temp % 10  
    sum += digit ** 3  
    temp //= 10  
if num == sum:  
    print(num,"is an Armstrong number")  
else:  
    print(num,"is not an Armstrong number")
```

Palindrome Program:

```
num=int(input("Enter a number:"))  
temp=num  
rev=0  
while(num>0):  
    dig=num%10  
    rev=rev*10+dig  
    num=num//10  
if(temp==rev):  
    print("The number is palindrome!")  
else:  
    print("Not a palindrome!")
```

Program to find if it is a leap year or not:

```
inputyear=int(input("Please Enter the Year Number you wish: "))
```

```
if (( inputyear%400 == 0)or (( inputyear%4 == 0 ) and ( inputyear%100 != 0))):  
    print(inputyear,"is a Leap Year")  
else:  
    print(inputyear,"is Not the Leap Year")
```

Multiplication Table Program:

```
num=int(input("Display multiplication table of"))  
for i in range(1,13):  
    print(num, 'x', i, '=', num*i)
```

Program to find largest of three numbers:

```
num1 = int(input("Enter first number: "))  
num2 = int(input("Enter second number: "))  
num3 = int(input("Enter third number: "))  
if (num1 >= num2) and (num1 >= num3):  
    largest = num1  
elif (num2 >= num1) and (num2 >= num3):  
    largest = num2  
else:  
    largest = num3  
print("The largest number is", largest)
```

Calculator Program (Arithmetic Operations)

```
def add(x, y):  
    return x + y  
def subtract(x, y):  
    return x - y  
def multiply(x, y):  
    return x * y  
def divide(x, y):  
    return x / y  
print("Select operation.")
```

```
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
choice = input("Enter choice(1/2/3/4): ")
num1 = float(input("Enter first number: "))
num2 = float(input("Enter second number: "))
if choice == '1':
    print(num1,"+",num2,"=", add(num1,num2))
elif choice == '2':
    print(num1,"-",num2,"=", subtract(num1,num2))
elif choice == '3':
    print(num1,"*",num2,"=", multiply(num1,num2))
elif choice == '4':
    print(num1,"/",num2,"=", divide(num1,num2))
else:
    print("Invalid input")
```