

1. Write a function to calculate the sum of the first N natural numbers using a loop.
2. Write a function to find the factorial of a given number using a loop.
3. Write a function to check if a given number is prime or not using an if-else condition.
4. Write a function to print the first N numbers in the Fibonacci sequence using a loop.
5. Write a function to find the greatest of three given numbers using if-else conditions.

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In [10]: # Write a function to calculate the sum of the first N natural numbers using a loop
def sumOfNums(n):
    sum=0
    for k in range(n+1):
        sum+=k
    return sum
input=10
print(f'Sum of First Natural Numbers till {input} is :',sumOfNums(10))
```

Sum of First Natural Numbers till 10 is : 55

```
In [14]: # Write a function to find the factorial of a given number using a loop.
def factOfN(n):
    fact=1
    for k in range(1,n+1):
        fact*=k
    return fact
input=5
print(f'Factorial of Given Numbers {input} is :',factOfN(5))
```

Factorial of Given Numbers 5 is : 120

```
In [44]: # Write a function to check if a given number is prime or not using an if-else cond
def oddCheck(n):
    count=0
    ##if (n==1):
    for k in range(2,n+1):
        if (n%k==0):
            count+=1
    if (count==1):
        return True
    else:
        return False
input=5
if oddCheck(input):
    print(f'Given Numbers {input} is : Prime Number')
else:
    print(f'Given Numbers {input} is :NOT Prime Number')
```

Given Numbers 5 is : Prime Number

```
In [76]: #Write a function to print the first N numbers in the Fibonacci sequence using a Lo
def factPrint(n):
    x=n
    if (n==0 or n==1):
        print(f'Fatorial of {n} is 1')
    return
```

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fact=1
while(n>0):
    fact*=n
    n-=1
    print(f'Fatorial of {x} is {fact}')
factPrint(5)
```

Fatorial of 5 is 120

```
In [92]: #Write a function to find the greatest of three given numbers using if-else conditi
def greatestOfThree(n1,n2,n3):
    if (n1>=n2 and n1>=n3):
        print(f'{n1} is greatest among 3 Numbers : {n1},{n2},{n3}')
    elif (n2>=n3):
        print(f'{n2} is greatest among 3 Numbers : {n1},{n2},{n3}')
    else:
        print(f'{n3} is greatest among 3 Numbers : {n1},{n2},{n3}')
greatestOfThree(30,30,36)
```

36 is greatest among 3 Numbers : 30,30,36

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In [ ]: max()
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