



## Python Programming - 2301CS404

### Lab - 4

Roll No.:424

Name:Jiya Patel

#### 01) WAP to print 1 to 10.

```
In [1]: for i in range(1,11):  
        print(i)
```

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

#### 02) WAP to print 1 to n.

```
In [2]: n=int(input("enter no"))  
        for i in range(1,n+1):  
            print(i)
```

1  
2  
3  
4

#### 03) WAP to print odd numbers between 1 to n.

```
In [3]: n=int(input("enter no"))
        for i in range (1,n+1):
            if(i%2!=0):
                print(i)
```

1  
3

**04) WAP to print numbers between two given numbers which is divisible by 2 but not divisible by 3.**

```
In [4]: n1=int(input("enter no"))
        n2=int(input("enter no"))
        for i in range (n1,n2+1):
            if(i%2==0 and i%3!=0):
                print(i)
```

2  
4  
8

**05) WAP to print sum of 1 to n numbers.**

```
In [8]: n=int(input("enter no"))
        sum=0
        for i in range (1,n+1):
            sum+=i
        print(sum)
```

15

**06) WAP to print sum of series  $1 + 4 + 9 + 16 + 25 + 36 + \dots n$ .**

```
In [11]: n=int(input("enter no"))
        sum=0
        for i in range (1,n+1):
            sum=sum+(i*i)
        print(sum)
```

14

**07) WAP to print sum of series  $1 - 2 + 3 - 4 + 5 - 6 + 7 \dots n$ .**

```
In [13]: n=int(input("enter no"))
        sum=0
        for i in range(1,n+1):
            if(i%2==0):
                sum-=i
            else:
                sum+=i
        print(sum)
```

2

## 08) WAP to print Multiplication Table of the given number.

```
In [14]: n=int(input("enter no"))
         for i in range (1,11):
             print(n,"*",i,"=",n*i)
```

```
2 * 1 = 2
2 * 2 = 4
2 * 3 = 6
2 * 4 = 8
2 * 5 = 10
2 * 6 = 12
2 * 7 = 14
2 * 8 = 16
2 * 9 = 18
2 * 10 = 20
```

## 09) WAP to find Factorial of the given number.

```
In [17]: n=int(input("enter no"))
         count=1
         for i in range (1,n+1):
             count=count*i
         print(count)
```

6

## 10) WAP to print GCD of given two numbers.

```
In [21]: a=int(input("enter no"))
         b=int(input("enter no"))
         temp=1
         for i in range(a,b+1):
             if(a%i==0 and b%i==0):
                 temp=i
         print(temp)

         while b!=0:
             a,b=b,a%b
```

1

## 11) WAP to find Factors of the given number.

```
In [2]: n=int(input("enter no"))
         i=1
         for i in range(1,n+1):
```

```
if(n%i==0):  
    print(i)
```

1  
2  
3  
6

## 12) WAP to find whether the given number is Prime or not.

```
In [7]: n=int(input("enter no"))  
for i in range(2,n):  
    if(n%i==0):  
        print("not prime")  
        break  
else:  
    print("prime")
```

prime

## 13) WAP to print sum of digits of given number.

```
In [16]: n=int(input("enter no"))  
sum=0  
while n>0:  
    rem=n%10  
    sum+=rem  
    n=n//10  
print(sum)
```

6

## 14) WAP to check whether the given number is Palindrome or not.

```
In [17]: n=int(input("enter no"))  
sum=0  
temp=n  
while n>0:  
    rem=n%10  
    sum=(sum*10)+rem  
    n=n//10  
if(sum==temp):  
    print("palimdrom")  
else:  
    print("not")
```

palimdrom

## 15) WAP to check whether the given number is an Armstrong Number or not.

```
In [23]: n=int(input("enter no"))
temp=n
digit=0
sum=0
while n>0:
    digit+=1
    n=n//10
n=temp
while n>0:
    rem= n%10
    sum=rem**digit+sum
    n=n//10
if(sum==temp):
    print("armstrong")
else:
    print("not")
```

armstrong

## 16) WAP to print all the perfect numbers between 1 to n.

```
In [42]: n=int(input("enter no"))

for j in range(1,n):
    sum=0
    for i in range(1,j):
        if j%i==0:
            sum+=i
    if(sum==j):
        print(j,"perfect")
```

6 perfect

28 perfect

In [ ]:

In [ ]: