



Python Programming - 2301CS404

Lab - 4

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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=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("palindrom")
else:
    print("not")
```

palindrom

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 []: