Darshan UNIVERSITY

योग: कर्मसु कौशलम्

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
```

02) WAP to print 1 to n.

In [2]:
```
n = int(input())

for i in range(1,n+1):
    print(i)
```

```
1
2
3
4
5
```

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

In [4]:
```
n = int(input())

for i in range(1,n+1):
    if(i%2!=0):
        print(i)
```

```
1
3
5
7
9
```

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

In [5]:
```
num1 = int(input())
num2 = int(input())

for i in range(num1,num2+1):
    if(i%2==0 and i%3!=0):
        print(i)
```

```
2
4
8
10
```

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

In [12]:
```
n = int(input())
sum = 0
for i in range(1,n+1):
    sum = sum + i
print(sum)
```

```
55
```

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

In [8]:
```
n = int(input())
sum =0
for i in range(1,n+1):
    sum = sum + i**2
print(sum)
```

```
14
```

07) WAP to print sum of series 1 – 2 + 3 – 4 + 5 – 6 + 7 ... n.

In [11]:
```
n = int(input())
sum =0
for i in range(1,n+1):
    if(i%2!=0):
        sum =sum+i
    else:
        sum = sum-i
print(sum)
```

```
-2
```

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

In [13]:
```
n = int(input())

for i in range(1,11):
    print(f'{n} x {i} = {n*i}')
```

```
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

09) WAP to find Factorial of the given number.

In [16]:
```
n = int(input())
fact =1
for i in range(1,n+1):
    fact = fact * i
print(fact)
```

```
120
```

10) WAP to print GCD of given two numbers.

In [19]:
```
num1 = int(input())
num2 = int(input())
temp = 0
for i in range(num1,num2+1):
    if(num1%i==0 and num2%i==0):
        temp = i
print(temp)
```

```
15
```

11) WAP to find Factors of the given number.

In [20]:
```
n = int(input())
fact =1
for i in range(1,n+1):
    if(n%i==0):
        print(i)
```

```
1
2
5
10
```

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

In [22]:
```
n = int(input())
count = 0
for i in range(1,n+1):
    if(n%i==0):
        count +=1
else:
    if(count==2):
        print("Given number is prime number")
    else:
        print("Given number is not prime number")
```

```
Given number is not prime number
```

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

In [30]:
```
num = int(input())
sum = 0
for i in range(1,num+1):
    rem = num%10
    sum = sum +rem
    num = num//10
print(sum)
```

```
8
```

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

In [45]:
```
num = input()
leng = len(num)
num = int(num)
numCopy = num
sum =0

for i in range(0,leng):
    rem = int(numCopy %10)
    sum = (sum*10) + rem
    numCopy = numCopy/10
else:
    if(sum==num):
```

```
        print("Given number is palindrome",sum)
    else:
        print("Given number is not palindrome",sum)
```

```
Given number is not palindrome 13221
```

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

In [47]:
```
num = input()
leng = len(num)
num = int(num)
numCopy = num
sum =0

for i in range(0,leng):
    rem = int(numCopy %10)
    sum = sum+ rem**leng
    numCopy = numCopy/10
print(sum)
```

```
10
```

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

In [59]:
```
n = int(input())
fact =1
sum =0
for i in range (1,n+1):
    for j in range(1,i):
        if(i%j==0):
            sum = int(sum +j)

    if(sum == i):
        print(i)
```

In [ ]:
```
```