

for and while loop

01) WAP to print 1 to 10.

```
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.

```
n=int(input("Enter Number:"))  
  
for i in range(1,n+1):  
    print(i)
```

Enter Number: 5

```
1  
2  
3  
4  
5
```

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

```
n = int(input("Enter Number:"))  
  
for i in range(1,n+1):  
    if(i % 2 !=0):  
        print(i)
```

Enter Number: 5

```
1  
3  
5
```

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

```
n1 = int(input("Enter 1st Number:"))
n2 = int(input("Enter 2nd Number:"))

for i in range(n1, n2+1):
    if(i%2==0 and i%3!=0):
        print(i)
```

Enter 1st Number: 1
Enter 2nd Number: 20

2
4
8
10
14
16
20

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

```
n = int(input("Enter Number:"))
sum = 0
for i in range(1,n+1):
    sum = sum+i
print(sum)
```

Enter Number: 10

55

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

```
n = int(input("Enter number:"))
sum = 0
for i in range(1,n+1):
    sum = sum+i*i
print(sum)
```

Enter number: 7

140

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

```
n = int(input("Enter number:"))
sum = 0
for i in range(1,n+1):
    if i%2==0:
```

```
        sum=sum-i
    else:
        sum=sum+i
print(sum)
```

Enter number: 7

4

08) WAP to print multiplication table of given number.

```
n = int(input("Enter no:"))
for i in range(1,11):
    print(n,"*",i,"=",n*i)
```

Enter no: 2

```
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.

```
n = int(input("Enter Number:"))
fact = 1

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

Enter Number: 5

120

10) WAP to find factors of the given number.

```
n = int(input("Enter Number:"))

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

Enter Number: 6

1
2
3
6

11) WAP to find whether the given number is prime or not.

```
n = int(input("Enter Number:"))

for count in range(2,n):
    if n%count==0:
        print("Number is not prime")
        break
    else:
        print("Number is Prime")
        break
```

Enter Number: 6

Number is not prime

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

```
no = int(input("Enter Number:"))
sum = 0
while(no>0):
    i = no % 10
    sum = sum+i
    no = no//10
print(sum)
```

Enter Number: 154

10

13) WAP to check whether the given number is palindrome or not

```
n = int(input("Enter Number:"))
a = n
sum = 0
while(n>0):
    i = n%10
    sum = sum*10+i
    n = n//10
if(a == sum):
    print("Number is Palindrome")
else:
    print("Number is Not Palindrome")
```

Enter Number: 151

Number is Palindrome

14) WAP to print GCD of given two numbers.

```
n1 = int(input("Enter 1st Number:"))
n2 = int(input("Enter 2nd Number:"))
min = 0
if(n1<n2):
    min = n1
else:
    min = n2
for i in range(1,min+1):
    if n1%i==0 and n2%i==0:
        gcd = i
print("gcd of:",n1,"and",n2,"is:",gcd)
```

Enter 1st Number: 60

Enter 2nd Number: 36

gcd of: 60 and 36 is: 12