

**sum of all even numbers that falls between two numbers (exclusive both numbers) entered from the user using while loop.**

```
m=int(input("enter m value")) # 5
n=int(input("enter n value")) # 10
num=m+1
s=0
while num<n:
    if num%2==0:
        s+=num
    num=num+1
```

```
print(f'sum of even numbers from {m+1} and {n-1} is {s}')
```

**Write a program to find the sum of the digits of a number accepted from the user.**

**123=1+2+3=6**

**421=4+2+1=7**

<b>123%10=3</b>	<b>123//10=12</b>
<b>12%10=2</b>	<b>12//10=1</b>
<b>1%10=1</b>	<b>1//10=0</b>

```
num=int(input("Enter any number"))
s=0
while num>0:
    r=num%10
    s=s+r
    num=num//10
```

```
print(f'sum of digits {s}')
```

**Write a program to find the product of the digits of a number accepted from the user.**

```
num=int(input("Enter any number")) # 123=6
s=1
while num>0:
    r=num%10
```

```
s=s*r
num=num//10
```

```
print(f'product of digits {s}')
```

**Write a program to reverse the number accepted from user using while loop.**

123 → 321      rev=0

123%10=3	rev=(rev*10)+3=3	123//10=12
12%10=2	rev=(3*10)+2=32	12//10=1
1%10=1	rev=(32*10)+1=321	1//10=0

```
num=int(input("Enter any number"))
rev=0
while num>0:
    r=num%10
    rev=(rev*10)+r
    num=num//10
```

```
print(f'Reverse Number {rev}')
```

**Finding input number is pal or not**

```
num=int(input("Enter any number")) # 121
num1=num
rev=0
while num>0:
    r=num%10
    rev=(rev*10)+r
    num=num//10
```

```
if num1==rev:
    print("pal")
else:
    print("not pal")
```

**Output:**

Enter any number121

```
pal
>>>
=== RESTART: C:/Users/user/Desktop/python6pm/py55.py ===
Enter any number123
not pal
>>>
```

**Write a program to display the number names of the digits of a number entered by user, for example if the number is 231 then output should be Two Three One**

```
num=int(input("Enter any number"))
num1=num
rev=0
while num>0:
    r=num%10
    rev=(rev*10)+r
    num=num//10
```

```
while rev>0:
    d=rev%10
    if d==0:
        print("Zero",end=' ')
    elif d==1:
        print("One",end=' ')
    elif d==2:
        print("Two",end=' ')
    elif d==3:
        print("Three",end=' ')
    elif d==4:
        print("Four",end=' ')
    elif d==5:
        print("Five",end=' ')
    elif d==6:
        print("Six",end=' ')
    elif d==7:
        print("Seven",end=' ')
    elif d==8:
        print("Eight",end=' ')
    elif d==9:
```

```
print("Nine",end=' ')
rev=rev//10
```

<https://csiplearninghub.com/questions-of-while-loop-in-python/>

## for loop

for statement or keyword

The **for** statement is used to iterate over the elements of a sequence (such as a string, tuple or list) or other iterable object:

Syntax:

for variable in iterable:

statement-1

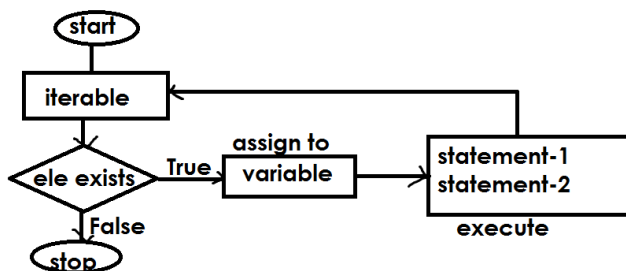
statement-2

iterable is an object which allows to read individual members

all collections are iterables

eg: string,list,tuple,bytes,bytesarray,set,frozenset,dictionary

```
for variable in iterable:
    statement-1
    statement-2
```



## Example:

```
for x in "NARESH I TECHNOLOGIES":
    print(x,end=' ')
```

## Output:

N A R E S H I T E C H N O L O G I E S

**# write a program to count how vowels exists input string**

```
str1=input("Enter any string") # java
```

```
c=0
```

```
for ch in str1:
```

```
if ch in "aeiouAEIOU":  
    c+=1
```

```
print(f'count of vowel {c} in {str1}')
```

**Output:**

```
Enter any stringjava  
count of vowel 2 in java
```

```
>>>
```

```
=== RESTART: C:/Users/user/Desktop/python6pm/py57.py ==
```

```
Enter any stringpython  
count of vowel 1 in python
```

```
>>>
```

Example:

```
# write a program to count number of alphabets,digits and special character  
# within string
```

```
# nit123$ ==> 3,3,1
```

```
str1=input("Enter any string")
```

```
dc,ac,sc=0,0,0
```

```
for ch in str1:
```

```
    if ch>='a' and ch<='z' or ch>='A' and ch<='Z':
```

```
        ac+=1
```

```
    elif ch>='0' and ch<='9':
```

```
        dc+=1
```

```
    else:
```

```
        sc+=1
```

```
print(f'alpahbet count {ac}')
```

```
print(f'digit count {dc}')
```

```
print(f'special character count {sc}')
```

**Output:**

```
Enter any stringpython 3.10
```

```
alpahbet count 6
```

```
digit count 3
```

```
special character count 2
```

```
>>>
```

Write a program to convert string into uppercase

Write a program to convert string into lowercase

Write a program to capitalize string