AMC ENGINEERING COLLEGE

Bannerghatta Road,Bengaluru-560083

Assignment - 1

Introduction To Python Programming

Submitted To:-

Prof.Rashmi Pruthi

CSE Department

Submitted By:-

TARUN G P

CSE ,D Sec.

Roll No :- 'D'1

To check the number even or odd

In [1]:

```python
print(": TARUN G P:".center (20))
num=int(input("enter a number:"))
if num%2==0:
    print("num is even")
else:
    print("num is odd")
```

```
    : TARUN G P:
enter a number:5
num is odd
```

To check the number positive or negative

In [2]:

```python
print(":TARUN G P:".center(20))
num=int(input("enter an integer:"))
if num>0:
    print("num is positive")
elif num<0:
    print("num is odd ")
else:
    print("num is zero")
```

```
    :TARUN G P:
enter an integer:9
num is positive
```

To find prime numbers

In [1]:

```python
print(":TARUN G P:".center(20))
num=int(input("enter a number:"))
count=0
for i in range(1,num+1):
    if(num%i==0):
        count +=1
if(count==2):
    print("the given number is prime")
else:
    print("the given number is not prime")
```

```
    :TARUN G P:
enter a number:4
the given number is not prime
```

To find pallindrom sequence

In [2]:

```python
print(":TARUN G P:".center(20))
num=int(input("enter a number:"))
num_str = str(num)
if num_str == num_str[::-1]:
    print("num is not a pllindrome")
else:
    print("num is not a pallindrome")
```

```
    :TARUN G P:
enter a number:345
num is not a pallindrome
```

To find sum of two numbers

In [3]:

```python
print(":TARUN G P:".center(20))
a=int(input("enter a num:"))
b=int(input("enter a num:"))
sum=a+b
print(sum)
```

```
    :TARUN G P:
enter a num:3
enter a num:5
8
```

To find the sum of two numbers using function

In [2]:

```python
print(":TARUN G P:".center(20))
def calculate_sum(num1,num2):
    return num1+num2
num1=int(input("enter a number:"))
num2=int(input("enter a number:"))
sum=num1+num2
print("sum:",sum)
```

```
     :TARUN G P:
enter a number:6
enter a number:7
sum: 13
```

To find maximum of two numbers ¶

In [11]:

```python
print(":TARUN G P:".center(20))
num1=5
num2=9
result=max(num1,num2)
print("maximum:",result)
```

```
    :TARUN G P:
maximum: 9
```

To find minimum of two numbers

In [12]:

```python
print(":TARUN G P".center(20))
num1=5
num2=9
result=min(num1,num2)
print("minimum:",result)
```

```
     :TARUN G P
minimum: 5
```

To Find Fibonacci Sequence

```
In [26]: print(":TARUN G P:".center(20))
         num=int(input("enter the fibonacci sequence length:"))
         a=0
         b=1
         print("the fibonacci series of sequence",num,"is;")
         print(a,b,end="")
         for i in range(2,num):
             c=a+b
             print(c,end="")
             a=b
             b=c
```

```
        :TARUN G P:
enter the fibonacci sequence length:4
the fibonacci series of sequence 4 is;
0 112
```

To Find The Factorial

```
In [31]: print(":TARUN G P:".center(20))
         n=int(input("enter a number:"))
         f=1
         if(n<0):
             print("not possible:")
         elif(n==0):
             print("the factorial=1")
         else:
             for i in range(1,n+1):
                 f=f*i
         print("factorial is:",f)
```

```
        :TARUN G P:
enter a number:5
factorial is: 120
```

To Find G.C.D Of Two Numbers

```
In [32]: print(":TARUN G P:".center(20))
         num_str="6789"
         reversed_str=num_str[::-1]
         print("reversed number:",reversed_str)
```

```
     :TARUN G P:
reversed number: 9876
```

To Swap Two Numbers

```
In [33]: print(":TARUN G P:".center(20))
         a=int(input("a="))
         b=int(input("b="))
         a,b=b,a
         print("after swapping:")
         print("a:",a)
         print("b:",b)
```

```
      :TARUN G P:
a=6
b=7
after swapping:
a: 7
b: 6
```

To Find Reverse Number In String

```
In [34]: print(":TARUN G P:".center(20))
         import math
         num1=int(input("enter a number:"))
         num2=int(input("enter a number:"))
         result=math.gcd(num1,num2)
         print("result:",result)
```

```
     :TARUN G P:
enter a number:3
enter a number:6
result: 3
```

To Guess The Number Using Random

```
In [35]: print(":TARUN G P:".center(20))
         import random
         number=random.randint(1,10)
         guess=0
         while guess!=number:
             guess=int(input("guess a number"))
             if guess<number:
                 print("guess a higher number")
             elif guess>number:
                 print("guess a lower number")
             else:
                 print("you guessed the correct number",number)
```

```
     :TARUN G P:
guess a number7
you guessed the correct number 7
```