

AMC ENGINEERING COLLEGE

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Assignment - 1

Introduction To Python Programming

Submitted To:-

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Even Or Odd

```
In [1]: print('Nikhil')
num=int(input("enter a number:"))
if num%2==0:
    print("num is even")
else:
    print("num is odd")
```

Nikhil
enter a number:4
num is even

Positive Or Negative

```
In [2]: print("Nikhil")
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")
```

Nikhil
enter an integer:-6
num is odd

Prime Number

```
In [28]: print("Nikhil")
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")
```

Nikhil
enter a number:5
the given number is prime

Pallindrome

```
In [3]: print("Nikhil")
num=int(input("enter a number:"))
num_str = str(num)
if num_str == num_str[::-1]:
    print("num is pallindrome")
else:
    print("num is not a pallindrome")
```

Nikhil
enter a number:212
num is pallindrome

Sum Of Two Numbers

```
In [4]: print("Nikhil")
a=int(input("enter a num:"))
b=int(input("enter a num:"))
sum=a+b
print(sum)
```

```
Nikhil
enter a num:5
enter a num:7
12
```

Sum Of Two Numbers Using Function

```
In [13]: print("Nikhil")
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)
```

```
Nikhil
enter a number:4
enter a number:5
sum: 9
```

Maximum Of Two Numbers

```
In [18]: print("Nikhil")
num1=3
num2=4
result=max(num1,num2)
print("maximum:",result)
```

Nikhil
maximum: 4

Minimum Of Two Numbers

```
In [19]: print("Nikhil")
num1=5
num2=2
result=min(num1,num2)
print("minimum:",result)
```

Nikhil
minimum: 2

Fibonacci Series

```
In [22]: print("Nikhil")
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
```

```
Nikhil
enter the fibonacci sequence length:5
the fibonacci series of sequence 5 is;
0 1123
```

Factorial Of Number

```
In [26]: print("Nikhil")
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)
```

```
Nikhil
enter a number:10
factorial is: 1
```

Reverse Number In String

```
In [27]: print("NIKHIL".center(20, '*'))
num_str="12345"
reversed_str=num_str[::-1]
print("reversed number:",reversed_str)
```

```
*****NIKHIL*****
reversed number: 54321
```

Swap Of Two Numbers

```
In [8]: print("Nikhil")
a=int(input("a="))
b=int(input("b="))
a,b=b,a
print("after swapping:")
print("a:",a)
print("b:",b)
```

```
Nikhil
a=4
b=6
after swapping:
a: 6
b: 4
```

G.C.D Of Two Numbers

```
In [32]: import math
num1=int(input("enter a number:"))
num2=int(input("enter a number:"))
result=math.gcd(num1,num2)
print("result:",result)
```

```
enter a number:8
enter a number:4
result: 4
```

Guess Number Using Random

```
In [3]: print("Nikhil")
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 correctly",number)
```

```
Nikhil
guess a number4
guess a higher number
guess a number5
guess a higher number
guess a number7
guess a higher number
guess a number8
you guessed the correctly 8
```