Fibonacci Integers

```
def Fibonacci(n):
  if n<0:
    print("Incorrect Input")
  elif n==0:
    return 0
  elif n==1 or n==2:
    return 1
  else:
    return Fibonacci(n-1)+Fibonacci(n-2)
print(Fibonacci(34))
```

```
5702887
```

Number is Prime or Not

```
from math import sqrt


n=7
prime_flag=0
if (n>1):
  for i in range(2,int(sqrt(n))+1):
   if (n%i==0):
    prime_flag=1
    break
  if (prime_flag==0):
    print("true")
  else:
     print("False")
else:
     print("False")
```

```
true
```

Factorial of a Number

```
def factorial(n):
    return 1 if (n==1 or n==0) else n * factorial(n - 1)
num = 5
print("Factorial of",num,"is",factorial(num))
```

```
Factorial of 5 is 120
```

GCD Of a Number

```
def hcfnaive(a,b):
  if(b==0):
    return abs(a)
  else:
    return hcfnaive(b,a%b)
a=60
b=40
print("The gcd of 60&40 is:",end="")
print (hcfnaive(60,40))
```

```
The gcd of 60&40 is:20
```

Palindrome Check

```
def isPalindrome(s):
  return s == s[::-1]
s = "malayalam"
ans = isPalindrome(s)

if ans:
  print("Yes")
else:
  print("No")
```

```
Yes
```

Check odd or even

```
num = int(input("Enter a number: "))
if (num % 2) == 0:
   print("{0} is Even".format(num))
else:
   print("{0} is Odd".format(num))
```

```
Enter a number: 4
4 is Even
```