# Assignment 3

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# Assignment 3

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[1]:
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# Q1. Write a function to return nth term of Fibonacci sequence.

k=int(input("Enter a number:"))
def fibo(n):
  if n==1:
    return 1
  elif n==0:
    return 0
  else:
    return fibo(n-1)+fibo(n-2)

result=fibo(k)
print("{0}th term of Fibonacci series is {1}".format(k,result))
```

```
Enter a number:5
5th term of Fibonacci series is 5
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[2]:
```
# Q2. Write a function to find out GCD of two numbers using EUCLID'S algorithm.

n1=int(input("Enter first number:"))
n2=int(input("Enter second number:"))
min1=min(n1,n2)
res=1
for i in range(2,min1+1):
  if ((n1%i==0) and (n2%i==0)):
    res=i

print("GCD of {0} and {1} is {2}".format(n1,n2,res))
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Enter first number:45
Enter second number:21
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GCD of 45 and 21 is 3
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[3]:
```python
# Q3. Write a function to find LCM of two number in most optimizers way.

n1=int(input("Enter first number:"))
n2=int(input("Enter second number:"))
j=max(n1,n2)
while(True):
  if (j%n1==0) and (j%n2==0):
    result=j
    break
  else:
    j=j+1

print("LCM of {0} and {1} is {2}".format(n1,n2,result))
```

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Enter first number:35
Enter second number:26
LCM of 35 and 26 is 910
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