## # Write a function to return nth term of fabonacci sequence.

```
In [7]: def fibonacci(n):
            a = 0
            b = 1
            if n < 0:
               print("Incorrect input")
            elif n == 0:
               return a
            elif n == 1:
               return b
            else:
                for i in range(2, n):
                   c = a + b
                   a = b
                    b = c
                return b
        print(fibonacci(9))
```

21

## # Write a function to find out GCD of two numbers using EUCLID'S algorithm.

```
In [8]: def gcd(m,n):
    if m< n:
        (m,n) = (n,m)
    while (m % n != 0):
        (m, n) = (n, m % n)
    return n

print(gcd(8,12))</pre>
```

## # Write a function to find LCM of two numbers in most optimizer way.

```
In [9]: def compute_gcd(x, y):
    while(y):
        x, y = y, x % y
    return x

def compute_lcm(x, y):
    lcm = (x*y)//compute_gcd(x,y)
    return lcm

num1 = 54|
num2 = 24

print("The L.C.M. is", compute_lcm(num1, num2))

The L.C.M. is 216
```