In [ ]:
```
ITERATIVE ALGORITHM
Algorithm Fibonacci(n)
//Compute the nth Fibonacci Number
{
    if (n<=1) then
        write(n);
    else
    {
        fnm2 = 0; fnm1 = 1;
        for i=2 to n do
        {
            fn = fnm1 + fnm2;
            fnm2 = fnm1; fnm1 = fn;
        }
        write(fn);
    }
}
```

In [4]:
```
#Iterative Program
nterms = int(input("Enter number of terms "))

n1, n2 = 0, 1

if nterms <= 1:
    print(n1)
else:
    print(n1)
    print(n2)
    for i in range(nterms-2):
        nth = n1 + n2
        n1 = n2
        n2 = nth
        print(nth)
```

```
Enter number of terms 5
0
1
1
2
3
```

In [ ]:
```
Recursive Algorithm
Algorithm rFibonacci(n)
{
    if (n <= 1)
        return n;
    else
        return rFibonacci(n - 1) + rFibonacci(n - 2);
}
```

In [5]:
```
#Recursive Program
def fibonacci(n):
    if n <= 1:
        return n
    return fibonacci(n-1) + fibonacci(n-2)

n = int(input("Enter Number of Terms : "))
```

```
for i in range(n):
    print(fibonacci(i))
```

```
Enter Number of Terms : 6
0
1
1
2
3
5
```