

In [1]:

```
1 # using while loop
```

In [2]:

```
1 nterms = int(input("enter no of terms? "))
2 n1, n2 = 1, 1
3 count = 0
4 print("Fibonacci sequence:")
5 while count < nterms:
6     print(n1)
7     nth = n1 + n2
8     # update values
9     n1 = n2
10    n2 = nth
11    count += 1
```

enter no of terms? 9

Fibonacci sequence:

```
1
1
2
3
5
8
13
21
34
```

In [3]:

```
1 # using if condition
```

In [4]:

```
1 nterms = int(input("enter no of terms? "))
2 n1, n2 = 1, 1
3 count = 0
4 if nterms == 1:
5     print("Fibonacci sequence upto",nterms,":")
6     print(n1)
7 else:
8     print("Fibonacci sequence:")
9     while count < nterms:
10         print(n1)
11         nth = n1 + n2
12         # update values
13         n1 = n2
14         n2 = nth
15         count += 1
```

enter no of terms? 9

Fibonacci sequence:

1  
1  
2  
3  
5  
8  
13  
21  
34

In [ ]:

1

In [45]:

```
1 x,y=0,1
2
3 while y<50:
4     print(y)
5     x,y = y,x+y
6
```

```
1
1
2
3
5
8
13
21
34
```