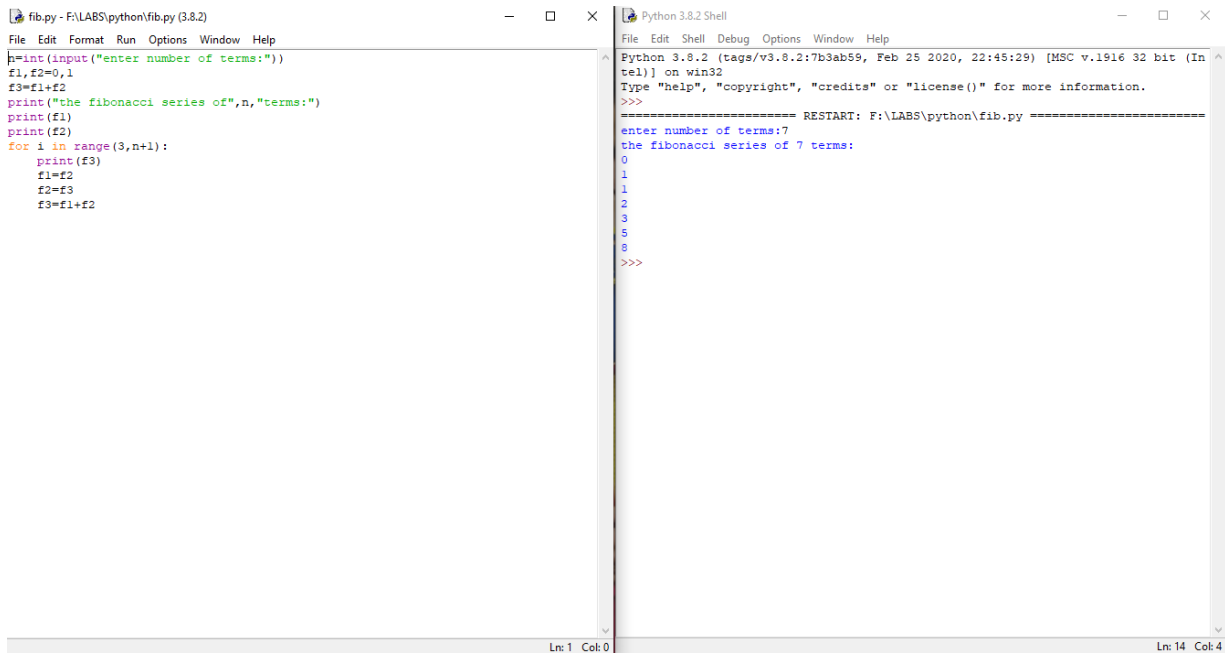


20MCA131

## Programming Lab

### 1.Generate Fibonacci series of n terms.



The image shows a screenshot of a Python IDE with two windows. The left window, titled 'fib.py - F:\LABS\python\fib.py (3.8.2)', contains the following code:

```
h=int(input("enter number of terms:"))
f1,f2=0,1
f3=f1+f2
print("the fibonacci series of",n,"terms:")
print(f1)
print(f2)
for i in range(3,n+1):
    print(f3)
    f1=f2
    f2=f3
    f3=f1+f2
```

The right window, titled 'Python 3.8.2 Shell', shows the output of the program. It displays the prompt 'enter number of terms:7', followed by 'the fibonacci series of 7 terms:', and then the sequence of numbers: 0, 1, 1, 2, 3, 5, 8. The shell also shows the restart command 'RESTART: F:\LABS\python\fib.py'.

Ln: 1 Col: 0

Ln: 14 Col: 4

## 2. Create a class time with private attributes hour, minute and second. Use '+' overload operator to find sum of 2 time.

```
time.py - F:/LABS/python/time.py (3.8.2)
File Edit Format Run Options Window Help
class time:
    def __init__(self,h,m,s):
        self.hr=h
        self.min=m
        self.sec=s
    def __add__(self,other):
        tempsec=self.sec+other.sec
        tempmin=tempsec/60
        self.sec=int(tempsec%60)
        self.min=self.min+other.min+tempmin
        tempshr=self.min/60
        self.min=int(self.min%60)
        self.hr=int(self.hr+other.hr+tempshr)
    def __str__(self):
        return str(self.hr)+'hr'+str(self.min)+'min'+str(self.sec)+'sec'
a=int(input("Enter hour of t1:"))
b=int(input("Enter minute of t1:"))
c=int(input("Enter second of t1:"))
x=int(input("Enter hour of t2:"))
y=int(input("Enter minute of t2:"))
z=int(input("Enter second of t2:"))
t1=time(a,b,c)
t2=time(x,y,z)
print(t1+t2)
```

```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (In
tel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: F:/LABS/python/time.py =====
7hr7min
>>>
===== RESTART: F:/LABS/python/time.py =====
Enter hour of t1:1
Enter minute of t1:23
Enter second of t1:10
Enter hour of t2:3
Enter minute of t2:22
Enter second of t2:31
4hr45min41sec
>>>
```

Ln: 28 Col: 0

Ln: 15 Col: 4