Labsheet-16 Concurrect Programming in Python.

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Question 1:

Create a global variable,rand_number=0.Create a function generate() that will generate a random integer from 1 to 100 and update the global variable,rand_number. Create another function display() that will display the generated random number which is available in the global variable,rand_number.Create two threads each one for generate() and display() functions.Start threads and observe each thread performimg their tasks.

In [2]:
```
import random as rm
m=0
class thread:

    def __init__(self,m):
        self.a=m
    def gen(self,m):
        self.x=rm.randint(1,100)
    def disp(self):
        print(self.x)
ob=thread(m)
ob.gen(m)
ob.disp()
```

```
57
```

Question 2:

Create a class SleepingThread which will sleep for a random period of time.It will print a message"Thread<<number>>
sleeps <<time>> seconds".Start 5 SleepingThread classes and observe the message.

In [5]:
```
import random as rm

class thread:
    count=0
    @classmethod
    def countcl(cls):
        cls.count+=1
    def __init__(self,m):
        thread.countcl()
        self.b=m
    def disp(self):
        self.m=rm.randint(1,100)
        print("thread %s sleeps %s second"%(thread.count,self.m))
ob=thread(m)
ob.disp()
```

```
thread 1 sleeps 97 second
```