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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 performing their tasks.

```
In [ ]:
     ▶ import random as rm
        import threading
        from time import sleep
        rand_number= 0
        class thread:
            def __init__(self,rand_number):
                self.a=rand_number
            def generate(self):
                self. b=rm.randint(1, 100)
            def display(self):
                print("random number:",self.b)
        #Main:
        t1=thread(rand_number)
        t1.generate()
        t1.display()
```

## **Question 2:**

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

```
In [53]:

import random as r

         class sleeping_thread:
             instance_count=0
             @classmethod
             def increment_instance_count(cls):
                 cls.instance_count+=1
             def __init__(self,rand_number):
                 sleeping_thread.increment_instance_count()
                 self.a=rand number
             def display(self):
                 self.b=rm.randint(1,100)
                 print("No. of Times Runned:",sleeping_thread.instance_count, "Time La
         #Main:
         t2=sleeping_thread(rand_number)
         t2.display()
```

No. of Times Runned: 1 Time Lapse: 33