|  |  |
| --- | --- |
| **PRACTICAL NO. 4B** | |
| NAME OF STUDENT | Madhukumar Paka |
| CLASS/BATCH/ROLL NUMBER | SEIT1/B1/08 |
| DATE OF PERFORMANCE | 03-05-2021 |
| DATE OF SUBMISSION | 03-05-2021 |
| PROBLEM STATEMENT | Write a Python program to create user-defined multithreaded application with thread synchronization and deadlocks |
| SOFTWARE USED | Google Colab |
| PROGRAM CODE | import threading  # global variable x  x = 0  def increases\_by\_one():    global x    x += 1  def thread\_task():    for \_ in range(100000):      increases\_by\_one()  def main\_task():    global x    x = 0    # creating threads    thread1 = threading.Thread(target=thread\_task)    thread2 = threading.Thread(target=thread\_task)    # start threads    thread1.start()    thread2.start()    thread1.join()    thread2.join()  if \_\_name\_\_ == "\_\_main\_\_":    for i in range(10):      main\_task()      print(" Test no. {0}: x = {1}".format(i,x)) |
| OUTPUT |  |
| CONCLUSION | This is how we implemented to Create a user-defined multithreaded application using Python. |
| LAB OUTCOME | 1] Understand the structure, syntax, and semantics of the Python language.  2] Create Python applications using modules, packages, multithreading and exception  Handling. |