DEVENDRA GURAV AI&DS 21

ASSIGNMENT 05

Given below is the code for multiprocessing

```
from multiprocessing import Process, Array, Lock
from time import sleep

def addThousands(inputNumber, lock):
    for _ in range(1000):
        sleep(0.01)
        with lock:
            for i in range(len(inputNumber)):
                inputNumber[i] += 1

if __name__ == '__main__':
    sharedArray = Array('d', [0.0, 100.0, 200.0])
    lock = Lock()

    print(f'Number at the beginning : {sharedArray[:]}')

    firstProcess = Process(target=addThousands, args=(sharedArray,
lock))
    secondProcess = Process(target=addThousands, args=(sharedArray,
lock))
    firstProcess.start()
    secondProcess.start()
    firstProcess.join()
    secondProcess.join()

    print(f'Value in the end : {sharedArray[:]}')
```

```
Number at the beginning : [0.0, 100.0, 200.0]
,Value in the end : [0.0, 100.0, 200.0]
```