

Lab report: TC1- AI/ML

- **Monkey Ladder**

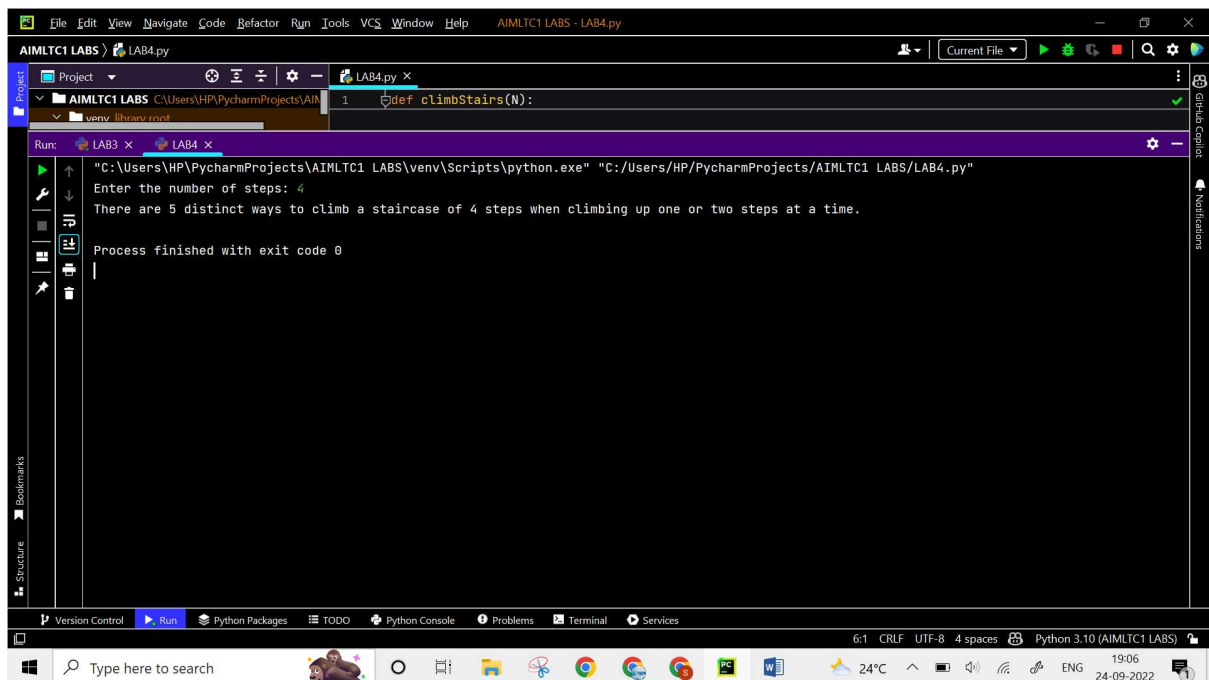
- **Code:**

```
# TC1_LAB4
# SIA_VASHIST_20190802107
# Monkey Ladder Problem

def climbStairs(N):
    if N < 2:
        return 1
    else:
        return climbStairs(N - 1) + climbStairs(N - 2)

steps = int(input("Enter the number of steps: "))
ways = climbStairs(steps)
print("There are " + str(ways) + " distinct ways to climb a staircase of "
+ str(steps) + " steps when climbing up one or two steps at a time.")
```

- **Output:**



The screenshot shows the PyCharm IDE interface. The top toolbar includes icons for File, Edit, View, Navigate, Code, Refactor, Run, Tools, VCS, Window, and Help. The main editor window displays the code for LAB4.py. The Run console at the bottom shows the execution output: "Enter the number of steps: 4" and "There are 5 distinct ways to climb a staircase of 4 steps when climbing up one or two steps at a time." The status bar at the bottom indicates "Process finished with exit code 0".