## **Output:**

```
PS C:\Users\user\OneDrive - College of Applied Business\Desktop\CAB\Lab\5th_sem_lab> cd "c:\Users\user\OneDrive - ab\5th_sem_lab\simulation\"; if ($?) { gcc 1_Markov_chain.c -o 1_Markov_chain }; if ($?) { .\1_Markov_chain } Enter the transition matrix (eg: 0.7 0.3 0.4 0.6 for a 2x2 matrix):
0.3
0.6
                                                                                                                                  Transition matrix:
0.700000 0.300000
0.600000 0.400000
Enter the current state matrix (eg. 1 0 for state 1):
Enter the number of steps to generate:
State sequence probabilities:
1.000000 0.000000
0.700000 0.300000
0.670000 0.330000
0.667000 0.333000
0.666700 0.333300
PS C:\Users\user\OneDrive - College of Applied Business\Desktop\CAB\Lab\5th_sem_lab\simulation>
```