```
C:\Users\gince\.conda\envs\SN-Project-1.2-GPU\python.exe C:/Users/gince/Documents/GitHub/Ulaval_projects/PHY-2007_physique_atomique/Projet/main.py

 Problem 2.a

--------------------------------------------------------------------------------
Transition (3 -> 2) :

R^s_mean / rs_mean_normalized_coeff  = 1.64616e-03
reference R^s  / rs_mean_normalized_coeff = 2.74669e-03

omega / omega_normalized_coeff  =  1.38889e-01
reference omega  / omega_normalized_coeff = 1.38889e-01
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Transition (4 -> 2) :

R^s_mean / rs_mean_normalized_coeff  = 5.58690e-04
reference R^s  / rs_mean_normalized_coeff = 5.24360e-04

omega / omega_normalized_coeff  =  1.87500e-01
reference omega  / omega_normalized_coeff = 1.87500e-01
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Transition (5 -> 2) :

R^s_mean / rs_mean_normalized_coeff  = 2.62367e-04
reference R^s  / rs_mean_normalized_coeff = 1.57596e-04

omega / omega_normalized_coeff  =  2.10000e-01
reference omega  / omega_normalized_coeff = 2.10000e-01
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
Transition (6 -> 2) :

R^s_mean / rs_mean_normalized_coeff  = 1.45304e-04
reference R^s  / rs_mean_normalized_coeff = 6.06110e-05

omega / omega_normalized_coeff  =  2.22222e-01
reference omega  / omega_normalized_coeff = 2.22222e-01
--------------------------------------------------------------------------------

 Problem 2.b

---
 I_(3, 2) / I_(4, 2) = 2.63e+3 [-]
x position (3, 2): -4.42e-03 [m]
---
---
 I_(4, 2) / I_(4, 2) = 1.00e+0 [-]
x position (4, 2): 0.00e+00 [m]
---
---
 I_(5, 2) / I_(4, 2) = 2.36e-2 [-]
x position (5, 2): 2.49e-03 [m]
---
---
 I_(6, 2) / I_(4, 2) = 2.89e-3 [-]
x position (6, 2): 3.96e-03 [m]
---

 Problem 2.c

---
 I_(3, 2) / I_(4, 2) = 2.63e+3 [-]
```

```
x position (3, 2): -4.42e-03 [m]
---
---
 I_(4, 2) / I_(4, 2) = 1.00e+0 [-]
x position (4, 2): 0.00e+00 [m]
---
---
 I_(5, 2) / I_(4, 2) = 2.36e-2 [-]
x position (5, 2): 2.49e-03 [m]
---
---
 I_(6, 2) / I_(4, 2) = 2.89e-3 [-]
x position (6, 2): 3.96e-03 [m]
---
--- elapse time : 1213.51 s ---

Process finished with exit code 0

```