```
 1 C:\Python312\python.exe C:\Users\deban\
   PycharmProjects\C1\.venv\Scripts\iterates.py
 2 Iteration=1
 3 Joint vector=[ 0.           -0.72079633  1.57079633  0
   .            1.57079633  0.10248    ]
 4 End effector config=
 5 [[ 7.68565244e-02  7.47338827e-01  6.59983146e-01  5.
   60754545e-01]
 6  [ 9.94753519e-01 -1.02300717e-01  1.11022302e-16  1.
   09000000e-01]
 7  [ 6.75167493e-02  6.56520557e-01 -7.51280405e-01 -4.
   93124739e-02]
 8  [ 0.00000000e+00  0.00000000e+00  0.00000000e+00  1.
   00000000e+00]]
 9 ||ωb||=1.7315771027935396
10 ||vb||=1.1180818484598387
11
12 Iteration=2
13 Joint vector=[-0.34001316 -1.71810618  5.01864394 -1.
   80729208  2.81976679 -0.79621091]
14 End effector config=
15 [[-0.54952891  0.78230898 -0.29327572 -0.49169376]
16  [ 0.42905694 -0.03695264 -0.90252127  0.20868229]
17  [-0.7168878  -0.62179351 -0.31534856  0.538223  ]
18  [ 0.          0.          0.          1.        ]]
19 ||ωb||=0.7941952464430936
20 ||vb||=0.463661561182442
21
22 Iteration=3
23 Joint vector=[-0.23013381 -2.00378921  4.4363883  -1.
   95371858  2.98673672 -1.07176663]
24 End effector config=
25 [[ 0.03150569  0.99525127 -0.09209938 -0.48246477]
26  [ 0.0684316  -0.09407678 -0.99321029  0.14250404]
27  [-0.99715822  0.02498927 -0.07107059  0.12941758]
28  [ 0.          0.          0.          1.        ]]
29 ||ωb||=0.11998953673550954
30 ||vb||=0.054611635770138646
31
32 Iteration=4
33 Joint vector=[-0.14448893 -2.11005785  4.5458032  -2.
```

```
33  39162768   3.01427659 -1.52355554]
34  End effector config=
35  [[ 0.00357606  0.99984405 -0.01729429 -0.49717412]
36   [ 0.00553886 -0.01731394 -0.99983476  0.10057958]
37   [-0.99997827  0.00347968 -0.00559991  0.10403856]
38   [ 0.          0.          0.          1.         ]]
39  ||ωb||=0.018518514107651644
40  ||vb||=0.0049630602875837876
41
42  Iteration=5
43  Joint vector=[-0.14233437 -2.13219801  4.56972826 -2.
    44292285  2.99940628 -1.57618108]
44  End effector config=
45  [[-4.66943744e-05  9.99999988e-01 -1.50038635e-04 -4.
    99951896e-01]
46   [-7.64161011e-04 -1.50074273e-04 -9.99999697e-01  1.
    00032416e-01]
47   [-9.99999707e-01 -4.65797066e-05  7.64168009e-04  1.
    00081450e-01]
48   [ 0.00000000e+00  0.00000000e+00  0.00000000e+00  1.
    00000000e+00]]
49  ||ωb||=0.0007801534943832356
50  ||vb||=9.999455497189775e-05
51
52  [-0.14233437 -2.13219801  4.56972826 -2.44292285  2.
    99940628 -1.57618108]
53  IK solution found
54  Theta=[-0.14233437 -2.13219801  4.56972826 -2.
    44292285  2.99940628 -1.57618108]
55
56  Process finished with exit code 0
57
```