```
 1 C:\Users\CCLaptop\anaconda3\python.exe C:/Users/
   CCLaptop/Desktop/Nho-m-1-project-1/Trusses2D.py
 2
 3 Global Stiffness Matrix of the Truss
 4  [[ 102859.126965        0.        -102859.126965
         0.
 5        0.              0.         ]
 6  [       0.         115000.              0.
   0.
 7        0.         -115000.        ]
 8  [-102859.126965        0.         145451.719558  -
   38095.97295
 9     -42592.592593    38095.97295 ]
10  [       0.              0.         -38095.97295
   34074.074074
11     38095.97295    -34074.074074]
12  [       0.              0.         -42592.592593
   38095.97295
13     42592.592593   -38095.97295 ]
14  [       0.         -115000.          38095.97295   -
   34074.074074
15     -38095.97295    149074.074074]]
16
17 ***Positive is Tensile
18 Negetive is Compressive***
19
20
21
22 Displacement matrix of nodes (mm)
23
24 [[ 0.        ]
25  [ 0.        ]
26  [-0.108696]
27  [-0.50196 ]
28  [ 0.       ]
29  [-0.086957]]
30
31
32 Strain in the elements
33 [[-2.429879e-05]
34  [-2.173913e-05]
```

```
35  [ 3.261072e-05]]
36
37 Stress in the elements [[-4.859757]
38  [-4.347826]
39  [ 6.522144]]
40
41 Process finished with exit code 0
42
```