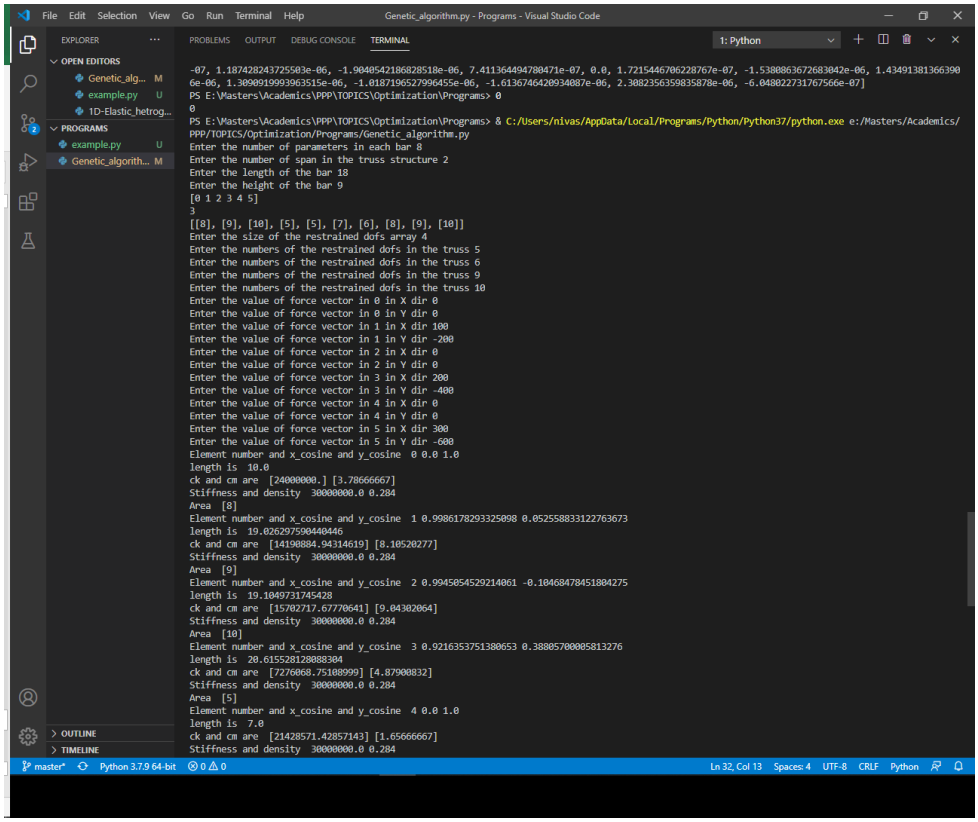
File Edit Selection View Go Run Terminal Help
Genetic_algorithm.py - Programs - Visual Studio Code
EXPLORER
OPEN EDITORS
Genetic_alg... M
example.py U
1D-Elastic_hetrog...
PROGRAMS
example.py U
Genetic_algorith... M
OUTLINE
TIMELINE
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
1: Python
-07, 1.187428243725503e-06, -1.9040542186828518e-06, 7.4113644947884 71e-07, 0.0, 1.7215446706228767e-07, -1.5388863672683042e-06, 1.43491381366390 6e-06, 1.3090919993963515e-06, -1.0187196527996455e-06, -1.6136746420934087e-06, 2.3082356359835878e-06, -6.048822731767566e-07]
PS E:\Masters\Academics\PPP\TOPICS\Optimization\Programs> 0
0
PS E:\Masters\Academics\PPP\TOPICS\Optimization\Programs> & C:/Users/nivas/AppData/Local/Programs/Python/Python37/python.exe e:/Masters/Academics/ PPP/TOPICS/Optimization/Programs/Genetic_algorithm.py
Enter the number of parameters in each bar 8
Enter the number of span in the truss structure 2
Enter the length of the bar 18
Enter the height of the bar 9
[0 1 2 3 4 5]
3
[[8], [9], [10], [5], [5], [7], [6], [8], [9], [10]]
Enter the size of the restrained dofs array 4
Enter the numbers of the restrained dofs in the truss 5
Enter the numbers of the restrained dofs in the truss 6
Enter the numbers of the restrained dofs in the truss 9
Enter the numbers of the restrained dofs in the truss 10
Enter the value of force vector in 0 in X dir 0
Enter the value of force vector in 0 in Y dir 0
Enter the value of force vector in 1 in X dir 100
Enter the value of force vector in 1 in Y dir -200
Enter the value of force vector in 2 in X dir 0
Enter the value of force vector in 2 in Y dir 0
Enter the value of force vector in 3 in X dir 200
Enter the value of force vector in 3 in Y dir -400
Enter the value of force vector in 4 in X dir 0
Enter the value of force vector in 4 in Y dir 0
Enter the value of force vector in 5 in X dir 300
Enter the value of force vector in 5 in Y dir -600
Element number and x_cosine and y_cosine 0 0.0 1.0
length is 10.0
ck and cm are [24000000.] [3.78666667]
Stiffness and density 30000000.0 0.284
Area [8]
Element number and x_cosine and y_cosine 1 0.9986178293325098 0.052558833122763673
length is 19.026297590440446
ck and cm are [14190884.94314619] [8.10520277]
Stiffness and density 30000000.0 0.284
Area [9]
Element number and x_cosine and y_cosine 2 0.9945054529214061 -0.10468478451804275
length is 19.104973174542 8
ck and cm are [15702717.67770641] [9.04302064]
Stiffness and density 30000000.0 0.284
Area [10]
Element number and x_cosine and y_cosine 3 0.9216353751380653 0.38805700005813276
length is 20.615528128088304
ck and cm are [7276068.75108999] [4.87900832]
Stiffness and density 30000000.0 0.284
Area [5]
Element number and x_cosine and y_cosine 4 0.0 1.0
length is 7.0
ck and cm are [21428571.42857143] [1.65666667]
Stiffness and density 30000000.0 0.284
master* Python 3.7.9 64-bit 0 0
Ln 32, Col 13 Spaces: 4 UTF-8 CRLF Python