Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
0	7	9.834383e+02	0.000e+00	1.887e+02	
1	18	1.952489e+02	2.069e+00	2.330e+02	2.426e+00
2	27	1.707816e+02	8.280e+00	2.475e+03	6.765e-01
3	42	1.267456e+02	6.303e+00	1.857e+02	8.962e-02
4	50	1.226071e+02	6.135e+00	2.017e+02	1.571e-01
5	58	1.073713e+02	7.819e+00	3.429e+02	4.888e-01
6	83	1.069732e+02	3.932e+00	6.068e+01	4.775e-03
7	91	1.068324e+02	3.925e+00	6.001e+01	6.775e-03
8	100	1.046438e+02	3.346e+00	4.812e+01	5.433e-01
9	109	1.029186e+02	2.767e+00	5.464e+02	7.182e-01
10	140	1.029066e+02	2.160e+00	1.975e+01	6.758e-04
11	149	1.029052e+02	2.159e+00	1.973e+01	7.176e-04
12	163	1.028964e+02	1.219e+00	2.053e+01	6.165e-04
13	172	1.028927e+02	1.198e+00	2.048e+01	1.414e-03
14	189	1.028855e+02	7.819e-01	2.097e+01	5.022e-04
15	198	1.028809e+02	7.370e-01	2.090e+01	1.383e-03
16	215	1.028742e+02	2.741e-01	2.104e+01	3.746e-04
17	224	1.028679e+02	1.680e-01	2.094e+01	1.304e-03
18	241	1.028614e+02	7.415e-02	2.087e+01	3.220e-04
19	251	1.028577e+02	3.144e-02	2.082e+01	6.089e-04
20	268	1.028545e+02	4.448e-03	2.074e+01	1.553e-04
21	278	1.028531e+02	1.746e-03	2.072e+01	3.313e-04
22	293	1.028499e+02	4.104e-03	2.065e+01	1.547e-04
23	302	1.028487e+02	1.398e-03	2.064e+01	3.372e-04
24	317	1.028455e+02	4.069e-03	2.056e+01	1.543e-04
25	326	1.028443e+02	1.011e-03	2.055e+01	3.410e-04
26	341	1.028411e+02	4.170e-03	2.047e+01	1.541e-04
27	350	1.028401e+02	5.898e-04	2.045e+01	3.438e-04
28	367	1.028385e+02	5.273e-04	2.042e+01	7.701e-05
29	377	1.028380e+02	5.928e-04	2.041e+01	1.731e-04
30	392	1.028364e+02	5.444e-04	2.037e+01	7.700e-05

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
31	402	1.028359e+02	4.859e-04	2.036e+01	1.739e-04
32	417	1.028344e+02	5.637e-04	2.032e+01	7.699e-05
33	427	1.028339e+02	3.734e-04	2.032e+01	1.748e-04
34	442	1.028323e+02	5.848e-04	2.028e+01	7.699e-05
35	452	1.028319e+02	2.658e-04	2.027e+01	1.756e-04
36	467	1.028303e+02	6.077e-04	2.024e+01	7.699e-05
37	477	1.028300e+02	1.616e-04	2.023e+01	1.762e-04
38	492	1.028284e+02	6.324e-04	2.019e+01	7.699e-05
39	502	1.028280e+02	6.265e-05	2.019e+01	1.768e-04
40	517	1.028264e+02	6.588e-04	2.015e+01	7.699e-05
41	527	1.028261e+02	3.455e-05	2.014e+01	1.774e-04
42	542	1.028245e+02	6.869e-04	2.010e+01	7.700e-05
43	552	1.028242e+02	1.264e-04	2.010e+01	1.779e-04
44	567	1.028226e+02	7.167e-04	2.006e+01	7.701e-05
45	576	1.028220e+02	1.140e-03	2.005e+01	3.566e-04
46	593	1.028205e+02	7.530e-04	2.001e+01	7.701e-05
47	602	1.028199e+02	8.998e-04	2.001e+01	3.574e-04

48	619	1.028183e+02	7.927e-04	1.997e+01	7.702e-05
49	628	1.028178e+02	6.710e-04	1.996e+01	3.581e-04
50	645	1.028163e+02	8.347e-04	1.992e+01	7.703e-05
51	654	1.028158e+02	4.578e-04	1.991e+01	3.587e-04
52	671	1.028142e+02	8.792e-04	1.987e+01	7.705e-05
53	680	1.028137e+02	2.528e-04	1.987e+01	3.593e-04
54	697	1.028122e+02	9.261e-04	1.983e+01	7.706e-05
55	706	1.028118e+02	5.998e-05	1.982e+01	3.598e-04
56	723	1.028102e+02	9.756e-04	1.979e+01	7.707e-05
57	732	1.028098e+02	1.194e-04	1.978e+01	3.602e-04
58	749	1.028082e+02	1.028e-03	1.974e+01	7.708e-05
59	758	1.028079e+02	2.890e-04	1.974e+01	3.606e-04
60	775	1.028063e+02	1.083e-03	1.970e+01	7.709e-05

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
61	784	1.028060e+02	4.519e-04	1.969e+01	3.609e-04
62	801	1.028044e+02	1.141e-03	1.966e+01	7.710e-05
63	810	1.028041e+02	6.030e-04	1.965e+01	3.613e-04
64	827	1.028026e+02	1.202e-03	1.961e+01	7.711e-05
65	836	1.028022e+02	7.536e-04	1.961e+01	3.615e-04
66	853	1.028007e+02	1.267e-03	1.957e+01	7.712e-05
67	862	1.028004e+02	8.932e-04	1.957e+01	3.618e-04
68	879	1.027989e+02	1.335e-03	1.953e+01	7.713e-05
69	888	1.027986e+02	1.032e-03	1.953e+01	3.620e-04
70	905	1.027971e+02	1.408e-03	1.949e+01	7.715e-05
71	914	1.027968e+02	1.167e-03	1.948e+01	3.622e-04
72	931	1.027953e+02	1.484e-03	1.945e+01	7.716e-05
73	940	1.027951e+02	1.297e-03	1.944e+01	3.624e-04
74	947	1.020628e+02	3.262e-01	6.757e+01	2.306e+00
75	954	1.011508e+02	9.245e-01	6.440e+01	8.437e-01
76	968	1.010739e+02	5.378e-01	5.874e+01	1.889e-02
77	976	1.010327e+02	5.403e-01	5.714e+01	6.961e-02
78	983	9.864004e+01	1.345e-01	4.553e+01	1.619e+00
79	991	9.623120e+01	1.053e-01	1.054e+02	3.380e+00
80	998	9.340755e+01	1.067e-02	5.970e+01	1.321e+00
81	1005	9.196172e+01	7.412e-03	5.722e+01	1.858e+00
82	1012	9.020730e+01	4.138e-03	6.042e+01	1.412e+00
83	1019	8.909489e+01	2.947e-03	2.977e+01	9.492e-01
84	1026	8.901711e+01	1.504e-04	3.909e+01	5.746e-01
85	1033	8.901402e+01	3.328e-06	3.737e+01	2.015e-01
86	1040	8.901251e+01	6.973e-07	3.707e+01	8.125e-02
87	1047	8.900165e+01	1.621e-05	3.648e+01	3.289e-01
88	1054	8.897042e+01	1.002e-04	3.600e+01	7.807e-01
89	1061	8.892204e+01	1.366e-04	3.610e+01	8.535e-01
90	1068	8.880758e+01	3.358e-04	3.653e+01	1.352e+00

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
91	1075	8.854828e+01	8.391e-04	3.665e+01	2.068e+00
92	1082	8.789206e+01	2.199e-03	3.310e+01	3.743e+00
93	1089	8.621534e+01	3.031e-03	1.923e+01	8.940e+00
94	1096	8.587130e+01	1.157e-03	3.840e+01	1.023e+01

95	1103	8.526554e+01	1.283e-03	1.814e+01	4.648e+00
96	1110	8.511282e+01	2.381e-04	1.620e+01	2.471e+00
97	1117	8.462219e+01	1.253e-04	2.053e+01	1.894e+00
98	1124	8.282028e+01	1.422e-03	3.033e+01	1.187e+01
99	1131	8.283463e+01	5.141e-05	2.497e+01	5.617e+00
100	1138	8.257780e+01	8.900e-05	1.743e+01	3.270e+00
101	1145	8.228893e+01	2.926e-04	1.111e+01	3.157e+00
102	1152	8.221356e+01	2.216e-05	2.096e+01	2.347e+00
103	1159	8.214068e+01	4.091e-06	7.258e+00	5.906e-01
104	1166	8.203194e+01	3.236e-05	6.637e+00	7.928e-01
105	1173	8.174791e+01	1.304e-04	1.949e+01	2.776e+00
106	1180	8.165224e+01	6.473e-05	6.855e+00	8.644e-01
107	1187	8.143077e+01	1.944e-05	1.813e+00	1.606e+00
108	1194	8.139051e+01	3.571e-06	2.367e+00	8.556e-01
109	1201	8.139522e+01	9.228e-08	2.808e+00	1.490e-01
110	1208	8.139406e+01	4.057e-09	2.816e+00	1.232e-01
111	1215	8.139389e+01	2.561e-09	2.695e+00	2.669e-01
112	1222	8.139115e+01	4.642e-09	2.263e+00	5.048e-01
113	1229	8.138482e+01	2.254e-08	2.441e+00	1.004e+00
114	1236	8.137213e+01	2.416e-08	2.532e+00	1.655e+00
115	1243	8.135496e+01	3.894e-08	1.864e+00	2.118e+00
116	1250	8.134591e+01	1.287e-07	5.415e-01	1.511e+00
117	1257	8.134587e+01	2.804e-08	2.856e-01	1.646e-01
118	1264	8.126962e+01	4.344e-07	1.076e+00	2.688e-01
119	1271	8.126286e+01	1.449e-08	6.133e-01	1.570e-01
120	1278	8.126097e+01	7.991e-09	9.739e-02	4.040e-02

Iter	F-count	f(x)	Feasibility	First-order optimality	Norm of step
121	1285	8.126095e+01	2.388e-11	2.074e-02	4.083e-02
122	1292	8.124818e+01	3.253e-08	1.227e-01	3.771e-02
123	1299	8.124515e+01	4.313e-09	2.562e-02	7.204e-03
124	1306	8.124482e+01	1.110e-11	7.523e-03	1.265e-02
125	1313	8.124482e+01	1.520e-12	4.000e-03	4.658e-03
126	1320	8.124231e+01	7.311e-10	2.778e-02	2.200e-02
127	1327	8.124168e+01	1.602e-10	6.256e-03	1.601e-02
128	1334	8.124161e+01	2.371e-12	8.014e-04	1.363e-03
129	1341	8.124110e+01	3.388e-13	4.119e-03	2.286e-03
130	1348	8.124098e+01	3.459e-12	6.036e-04	8.076e-04
131	1355	8.124097e+01	1.493e-13	1.603e-04	3.348e-04
132	1362	8.124087e+01	1.742e-13	3.542e-04	8.176e-04
133	1369	8.124084e+01	1.865e-13	1.332e-04	2.634e-04
134	1376	8.124084e+01	5.296e-14	3.206e-05	7.280e-05
135	1383	8.124082e+01	7.439e-14	7.733e-05	3.745e-04
136	1390	8.124082e+01	1.426e-13	4.219e-05	1.763e-04
137	1397	8.124082e+01	2.297e-14	6.412e-06	3.683e-05
138	1404	8.124081e+01	1.024e-13	5.342e-05	1.733e-04
139	1411	8.124081e+01	6.104e-14	1.578e-05	1.026e-04
140	1418	8.124081e+01	9.870e-15	3.482e-06	3.984e-05
141	1426	8.124081e+01	5.024e-15	3.080e-06	8.715e-06
142	1436	8.124081e+01	4.438e-15	2.532e-06	6.416e-06
143	1447	8.124081e+01	3.044e-19	1.582e-06	2.222e-08
144	1457	8.124081e+01	7.216e-18	2.886e-05	6.965e-07

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  145    1465    8.124081e+01    1.385e-17    2.094e-05    1.772e-06
  146    1475    8.124081e+01    1.275e-17    1.709e-05    3.663e-07
  147    1493    8.124081e+01    1.171e-21    1.518e-05    2.402e-09

Local minimum possible. Constraints satisfied.

fmincon stopped because the size of the current step is less than
the value of the step size tolerance and constraints are
satisfied to within the value of the constraint tolerance.

<stopping criteria details>

params =

   46.9057    0.4781    0.0002   15.0692    0.4545    0.0001

                                            First-order      Norm of
 Iter F-count            f(x)  Feasibility   optimality         step
    0       2    2.578531e+01    0.000e+00    2.659e+01
    1       4    2.515206e-01    0.000e+00    4.167e-02    2.426e+01
    2       6    2.499349e-01    0.000e+00    4.154e-02    3.812e-02
    3       8    2.421007e-01    0.000e+00    4.092e-02    1.900e-01
    4      10    2.051566e-01    0.000e+00    3.808e-02    9.359e-01
    5      12    6.283949e-02    0.000e+00    2.807e-02    4.354e+00
    6      16    1.513279e-02    0.000e+00    2.320e-02    3.054e+00
    7      19    1.241047e-03    0.000e+00    2.423e-02    6.905e-01
    8      23    8.883724e-04    0.000e+00    2.405e-02    8.820e-02
    9      25    1.707634e-04    0.000e+00    2.417e-02    4.393e-02
   10      28    9.496477e-05    0.000e+00    2.410e-02    1.101e-02
   11      30    3.766735e-05    0.000e+00    2.416e-02    5.497e-03
   12      32    2.874798e-05    0.000e+00    2.410e-02    2.752e-03
   13      34    4.414099e-06    0.000e+00    2.416e-02    1.374e-03
   14      37    3.887371e-06    0.000e+00    2.410e-02    3.440e-04
   15      39    2.581172e-07    0.000e+00    2.416e-02    1.718e-04
   16      44    1.301872e-09    0.000e+00    2.410e-02    1.075e-05
   17      56    7.223081e-10    0.000e+00    2.116e-02    8.388e-08

Local minimum possible. Constraints satisfied.

fmincon stopped because the size of the current step is less than
the value of the step size tolerance and constraints are
satisfied to within the value of the constraint tolerance.

<stopping criteria details>

nu_Z =

   33.1924

>> Run_final_project_group2A
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