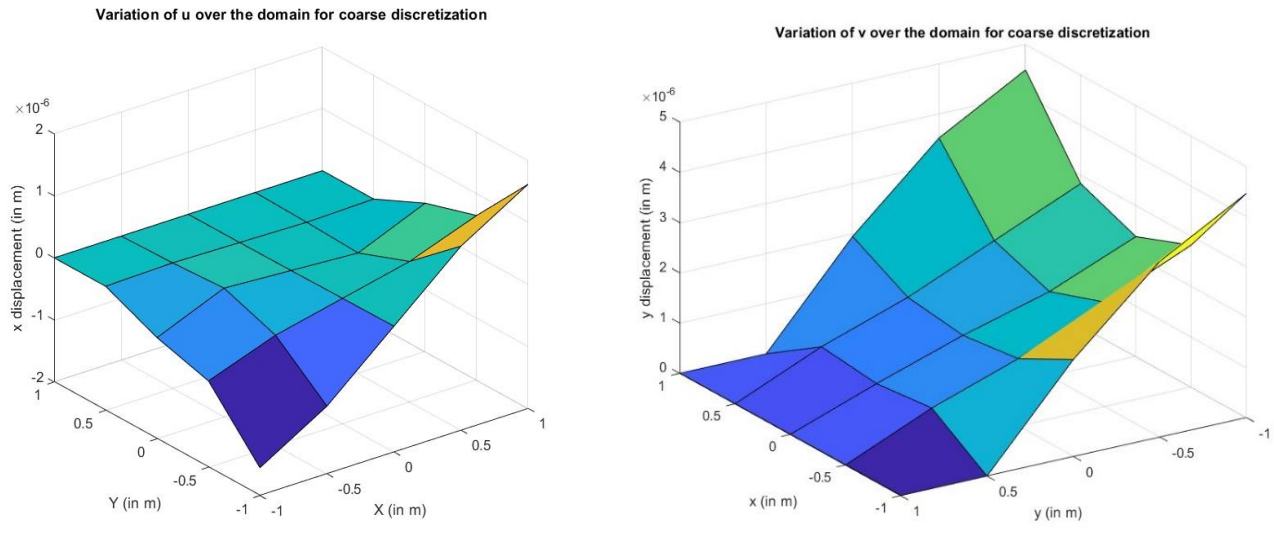
Output 1

For total number of element (n_e ==16),

Global X	Global Y	Global U	Global V
0	0	-1.55E-06	4.46E-06
0.5	0	-9.09E-07	2.82E-06
1	0	2.83E-08	2.38E-06
1.5	0	9.68E-07	2.83E-06
2	0	1.61E-06	4.48E-06
0	0.5	-6.10E-07	3.50E-06
0.5	0.5	-2.24E-07	2.08E-06
1	0.5	1.88E-08	1.68E-06
1.5	0.5	2.62E-07	2.08E-06
2	0.5	6.52E-07	3.52E-06
0	1	-3.70E-07	1.93E-06
0.5	1	7.70E-08	1.34E-06
1	1	8.98E-09	1.19E-06
1.5	1	-5.91E-08	1.34E-06
2	1	3.92E-07	1.95E-06
0	1.5	0	0
0.5	1.5	2.61E-08	7.46E-07
1	1.5	2.18E-09	6.23E-07
1.5	1.5	-2.27E-08	7.49E-07
2	1.5	0	0
0	2	0	0
0.5	2	0	0
1	2	0	0
1.5	2	0	0
2	2	0	0



(a) (b)

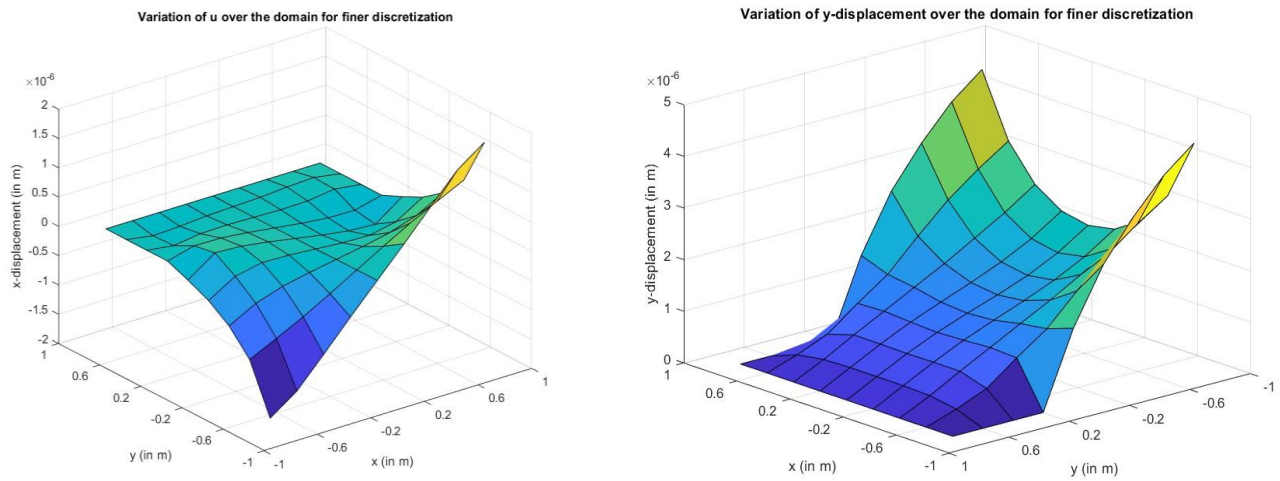
Figure 1 – (a) Variation of u over the domain for coarse discretization (b) Variation of v over the domain for coarse discretization

Output 2

For total number of element (n_e ==64),

Global X	Global Y	Global U	Global V
0	0	-1.77E-06	4.45E-06
0.25	0	-1.44E-06	3.25E-06
0.5	0	-9.58E-07	2.59E-06
0.75	0	-4.61E-07	2.26E-06
1	0	2.22E-08	2.16E-06
1.25	0	5.06E-07	2.26E-06
1.5	0	1.01E-06	2.60E-06
1.75	0	1.49E-06	3.26E-06
2	0	1.82E-06	4.47E-06
0	0.25	-9.50E-07	3.98E-06
0.25	0.25	-7.29E-07	2.86E-06
0.5	0.25	-5.01E-07	2.20E-06
0.75	0.25	-2.45E-07	1.87E-06
1	0.25	1.86E-08	1.78E-06
1.25	0.25	2.83E-07	1.88E-06
1.5	0.25	5.39E-07	2.21E-06
1.75	0.25	7.69E-07	2.87E-06
2	0.25	9.91E-07	4.00E-06
0	0.5	-5.59E-07	3.34E-06
0.25	0.5	-3.13E-07	2.42E-06
0.5	0.5	-1.64E-07	1.86E-06
0.75	0.5	-6.73E-08	1.58E-06
1	0.5	1.42E-08	1.49E-06
1.25	0.5	9.59E-08	1.58E-06
1.5	0.5	1.93E-07	1.86E-06
1.75	0.5	3.43E-07	2.43E-06
2	0.5	5.91E-07	3.36E-06
0	0.75	-3.09E-07	2.56E-06
0.25	0.75	-3.40E-08	1.87E-06
0.5	0.75	5.96E-08	1.52E-06
0.75	0.75	4.56E-08	1.33E-06
1	0.75	9.84E-09	1.27E-06
1.25	0.75	-2.59E-08	1.33E-06
1.5	0.75	-3.97E-08	1.53E-06
1.75	0.75	5.50E-08	1.88E-06
2	0.75	3.32E-07	2.58E-06
0	1	-1.44E-07	1.48E-06
0.25	1	1.83E-07	1.29E-06
0.5	1	1.56E-07	1.22E-06
0.75	1	8.81E-08	1.11E-06
1	1	5.96E-09	1.07E-06
1.25	1	-7.64E-08	1.11E-06

1.5	1	-1.45E-07	1.22E-06
1.75	1	-1.72E-07	1.30E-06
2	1	1.57E-07	1.49E-06
0	1.25	0	0
0.25	1.25	1.19E-07	8.84E-07
0.5	1.25	1.12E-07	9.09E-07
0.75	1.25	6.50E-08	8.74E-07
1	1.25	3.00E-09	8.51E-07
1.25	1.25	-5.92E-08	8.76E-07
1.5	1.25	-1.07E-07	9.11E-07
1.75	1.25	-1.16E-07	8.87E-07
2	1.25	0	0
0	1.5	0	0
0.25	1.5	-6.09E-08	4.42E-07
0.5	1.5	2.13E-09	6.04E-07
0.75	1.5	1.27E-08	6.02E-07
1	1.5	1.12E-09	5.94E-07
1.25	1.5	-1.06E-08	6.03E-07
1.5	1.5	-5.23E-10	6.06E-07
1.75	1.5	6.19E-08	4.44E-07
2	1.5	0	0
0	1.75	0	0
0.25	1.75	-7.55E-08	1.99E-07
0.5	1.75	-5.39E-08	2.82E-07
0.75	1.75	-1.76E-08	3.02E-07
1	1.75	1.83E-10	3.01E-07
1.25	1.75	1.79E-08	3.03E-07
1.5	1.75	5.43E-08	2.83E-07
1.75	1.75	7.60E-08	2.00E-07
2	1.75	0	0
0	2	0	0
0.25	2	0	0
0.5	2	0	0
0.75	2	0	0
1	2	0	0
1.25	2	0	0
1.5	2	0	0
1.75	2	0	0
2	2	0	0



(a) (b)

Figure 1 – (a) Variation of u over the domain for fine discretization (b) Variation of v over the domain for fine discretization