	Max stress at 1 mm cantilever end displacement (MPa)			Max stress at 5 mm cantilever end displacement (MPa)		
Volume Fraction	Holes	Mat A	Mat B	Holes	Mat A	Mat B
0.1	622.2448	382.41037	281.1238	3111.224	1912.052	281.1238
0.15	338.8414	247.766159	270.4947	1694.207	1238.831	270.4947
0.2	627.9702	421.764526	257.462	3139.851	2108.822	257.462
0.25	596.8199	400.048889	284.4005	2984.1	2000.244	284.4005
0.3	344.0836	270.011566	280.1042	1720.418	1350.058	280.1042
0.35	534.295	288.397522	278.4342	2671.475	1441.988	278.4342
0.4	384.0533	270.313843	285.0964	1920.267	1351.569	285.0964
0.45	562.757	403.45932	310.4611	2813.785	2017.297	310.4611
0.5	425.7577	333.556854	305.1353	2128.788	1667.784	305.1353
0.55	330.0016	340.363647	322.4433	1650.008	1701.818	322.4433
0.6	411.0307	393.639832	322.5807	2055.154	1968.199	322.5807
0.65	485.8028	451.577881	322.5977	2429.014	2257.889	322.5977
0.7	436.1982	390.22345	328.4326	2180.991	1951.117	328.4326

Cantilever beam with dimensions: 100mm*20mm*1mm

Beam Material: E=80 GPa, nu=0.33; Mat A: E=10 GPa nu=0.34; Mat B: E=150 GPa and nu=0.4

Also, collect microstructure images at maximum stress in a separate folder. Submit link to folder as part of homework 1.

	Displacement at cantilever end at 100 N end load (mm)			Displacement at cantilever end at 500 N end load (mm)		
Volume Fraction	Holes	Mat A	Mat B	Holes	Mat A	Mat B
0.1	0.975494742	0.81185442	0.63321126	5.852968693	4.87112665	3.79926753
0.15	0.777686119	0.7183398	0.65866578	4.666116714	4.31003904	3.95199466
0.2	1.01016748	0.8148219	0.63839102	6.061004639	4.88893175	3.83034611
0.25	1.207677007	0.91026896	0.62354016	7.246062279	5.46161366	3.74124074
0.3	0.985368669	0.83904529	0.62064612	5.912212372	5.03427124	3.72387695
0.35	1.118869543	0.87795299	0.60921901	6.713216782	5.26771784	3.65531397
0.4	1.21135962	0.86965227	0.61592317	7.268157482	5.21791315	3.695539
0.45	1.825900912	1.20239174	0.55895829	10.95540524	7.21435022	3.35374975
0.5	1.959617972	1.17751658	0.55060107	11.7577076	7.06510019	3.30360651
0.55	2.427616119	1.29914892	0.54038113	14.56569672	7.79489374	3.24228668
0.6	2.559565306	1.40823841	0.51242006	15.35739136	8.44943047	3.07452035
0.65	3.952636957	1.54630208	0.49870613	23.71582222	9.277812	2.99223685
0.7	5.855989933	1.63803256	0.49126866	35.13594055	9.82819557	2.94761205

Cantilever beam with dimensions: 100mm*20mm*1mm

Beam Material: E=80 GPa, nu=0.33; Mat A: E=10 GPa nu=0.34; Mat B: E=150 GPa and nu=0.4

Also, collect microstructure images at maximum stress in a separate folder. Submit link to folder as part of homework 1.