Table_Direct_Solver =

  2×4 table

	Grid_Size_7	Grid_Size_15	Grid_Size_31	Grid_Size_63
Run Time	0.0556868950277821	0.0049308080456508	0.0520956603534475	1.64134819447642
Storage(bytes)	20248	409112	7404568	126089240

Table_Sparse_Solver =

  2×4 table

	Grid_Size_7	Grid_Size_15	Grid_Size_31	Grid_Size_63
Run Time	0.00944127028324703	0.0249423028524613	0.0122118935552331	0.12329206626292
Storage(bytes)	4912	22960	98992	410800

Table_Gauss_Seidel_Solver =

  2×4 table

	Grid_Size_7	Grid_Size_15	Grid_Size_31	Grid_Size_63
Run Time	0.0195875791829763	0.00940735703334029	0.12225860459471	1.38613001626051
Storage(bytes)	1040	4112	16400	65552

Number of iterations Gauss-Seidel takes to converge:-
Iterations for step size 7 is 75
Iterations for step size 15 is 299
Iterations for step size 31 is 1196
Iterations for step size 63 is 4779
Iterations for step size 127 is 19103

Gauss_Seidel_Error_Table =

  2×5 table

	Grid_Size_7	Grid_Size_15	Grid_Size_31	Grid_Size_63	Grid_Size_127
Error	0.00739613084115929	0.00171180901635561	0.000409732325993739	9.69550504498677e-05	2.02357722914874e-05
Error Reduced	0	4.32065187792118	4.17787152186223	4.22600291673921	4.79127008612633