

Console

n	xn Xn+1	f(xn) Error	f1(xn)
0	1.45	0.96705	0.32232
	-1.5503	3.0003	
1	-1.5503	-0.99791	0.29383
	1.8459	3.3962	
2	1.8459	1.0743	0.22689
	-2.8891	4.735	
3	-2.8891	-1.2376	0.10699
	8.6784	11.568	
4	8.6784	1.4561	0.013104
	-102.44	111.12	
5	-102.44	-1.561	9.5279e-005
	16281	16384	
6	16281	1.5707	3.7724e-009
	-4.1636e+008		4.1638e+008
7	-4.1636e+008	-1.5708	5.7685e-01
8	2.723e+017		2.723e+017
8	2.723e+017	1.5708	1.3486e-03
5	-1.1647e+035		1.1647e+035
9	-1.1647e+035	-1.5708	7.3712e-07
1	2.131e+070		2.131e+070
10	2.131e+070	1.5708	2.2021e-14
1	-7.1332e+140		7.1332e+140
11	-7.1332e+140	-1.5708	1.9653e-28
2	7.9925e+281		7.9925e+281

Therefore, it is divergent