${ m CS~374:Computational~and~Numerical~Methods}$ Set 11

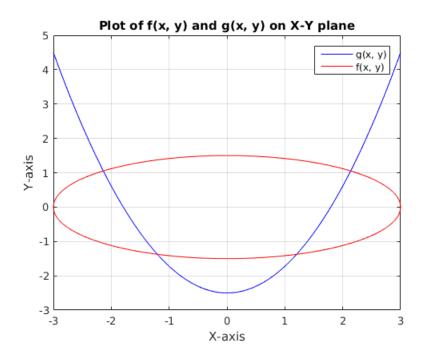
SOLUTION OF NON-LINEAR EQUATION

PURVIL MEHTA (201701073) BHARGEY MEHTA (201701074)

 $\label{lem:communication} Dhirubhai\ Ambani\ Institute\ of\ Information\ and\ Communication\ Technology\\ Gandhinagar$

OCTOBER 17, 2019

1 Visulization



2 Initial value = [-1, -1]

itrno	\boldsymbol{x}	у
1	-1	-1
2	-1.1702	-1.4574
3	-1.2022	-1.3768
4	-1.2032	-1.3741
5	-1.2032	-1.3741

3 Initial value = [-1,1]

itrno	\boldsymbol{x}	у
1	-1	1
2	-2.7846	1.0538
3	-2.2125	1.0527
4	-2.1385	1.0527
5	-2.1372	1.0527
6	-2.1372	1.0527

4 Initial value = [1,1]

itrno	\boldsymbol{x}	y
1	1	1
2	2.7846	1.0538
3	2.2125	1.0527
4	2.1385	1.0527
5	2.1372	1.0527
6	2.1372	1.0527

5 Initial value = [1,-1]

itrno	\boldsymbol{x}	у
1	1	-1
2	1.1702	-1.4574
3	1.2022	-1.3768
4	1.2032	-1.3741
5	1.2032	-1.3741