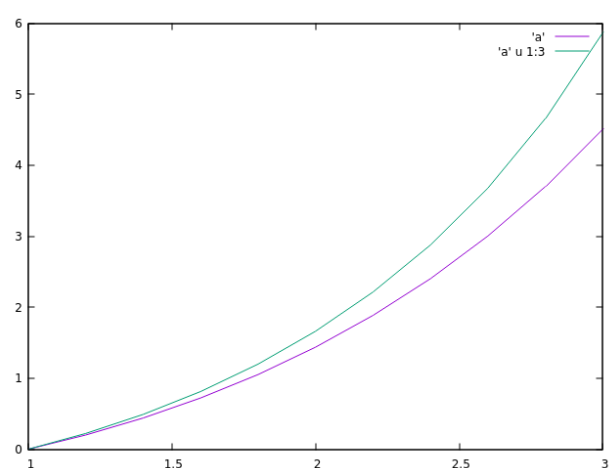
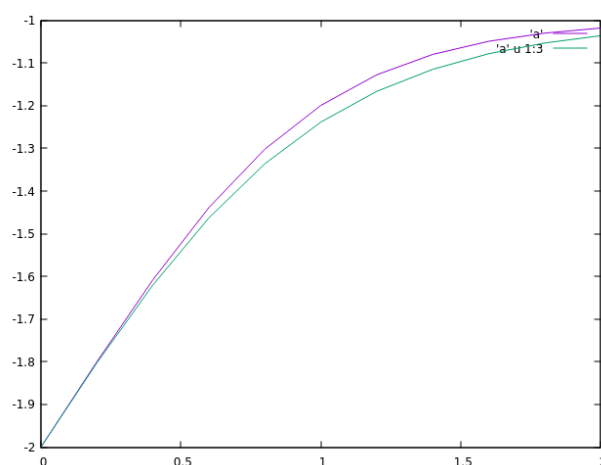


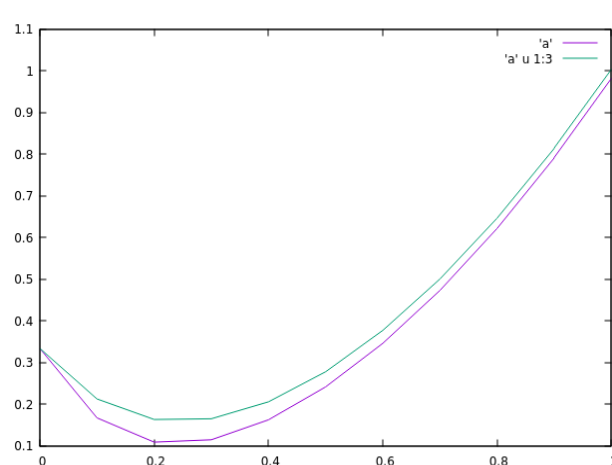
fig(a)



fig(b)



fig(c)

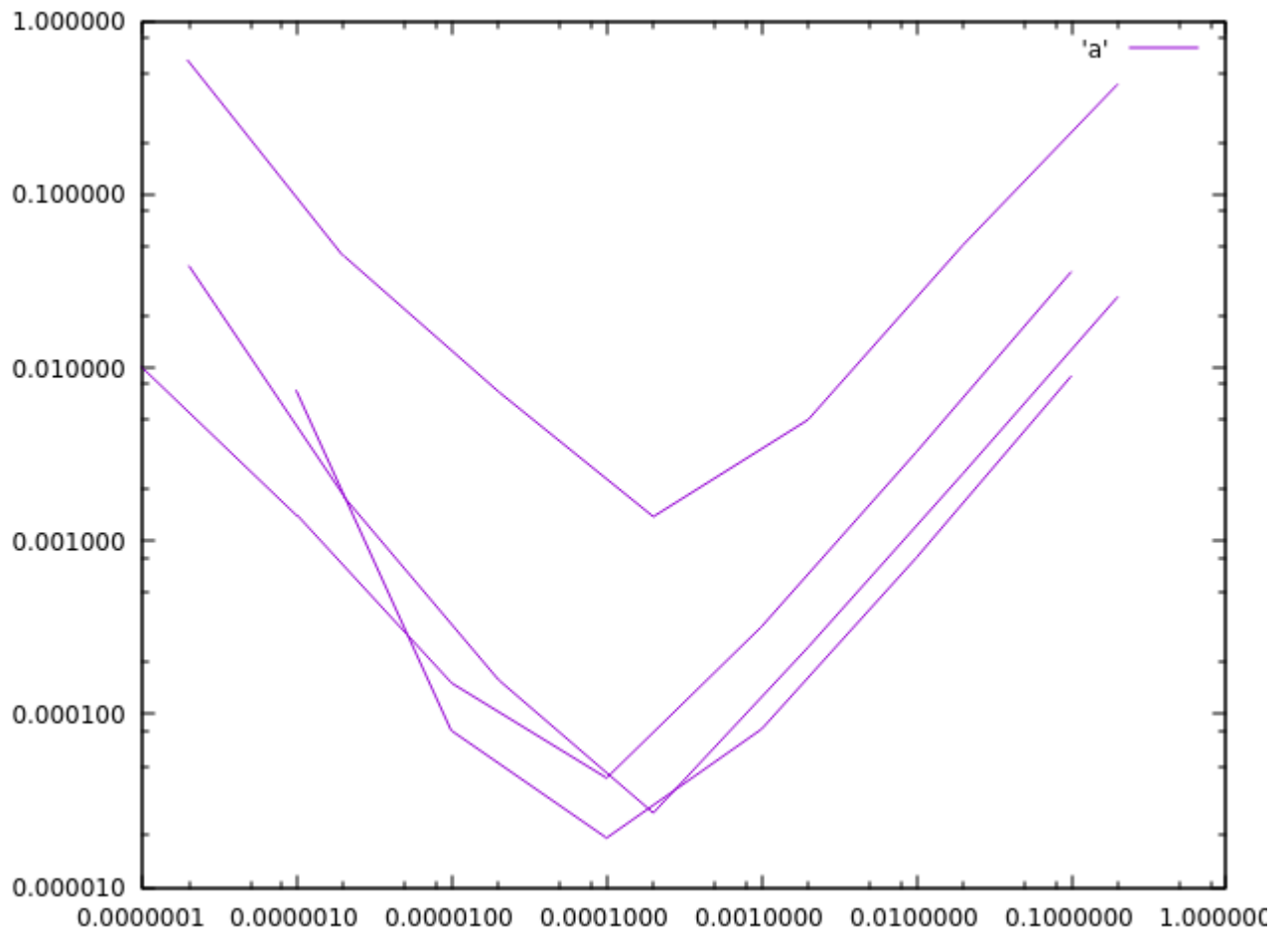


fig(d)

Above are the graphs for approximate solutions (violet) and exact solutions (green) for each each of the IVPs.

	t	y(t)	y_exact(t)
i)	1.25	1.014977	1.021957
	1.93	1.153902	1.164390
ii)	2.1	1.660756	1.924962
	2.75	3.526160	4.394170
iii)	1.3	-1.103618	-1.138277
	1.93	-1.022283	-1.041267
iv)	0.54	0.282833	0.314002
	0.94	0.866552	0.886632

For order of convergence of above cases, we plot the logscale of h vs error:



From the plot , we observe that the error blows up after decreasing h beyond 0.0001.