

### List of Differential equations to be used in Assignment#4

Name of Differential Equations	Systems to be used	Parameters values to be used	Initial conditions to be used
<b>1. Lorenz system</b>	$\frac{dx}{dt} = \alpha(y - x),$ $\frac{dy}{dt} = x(\beta - z) - y,$ $\frac{dz}{dt} = (xy - \gamma z),$	$\alpha = 10, \beta = 28, \gamma = 8/3$	$x_0 = 1, y_0 = 1, z_0 = 1$
<b>2. Rossler system</b>	$\frac{dx}{dt} = -y - x,$ $\frac{dy}{dt} = x + ay,$ $\frac{dz}{dt} = b + z(x - c).$	$a = 0.2, b = 0.2, c = 5.7$	$x_0 = 1, y_0 = 1, z_0 = 1$