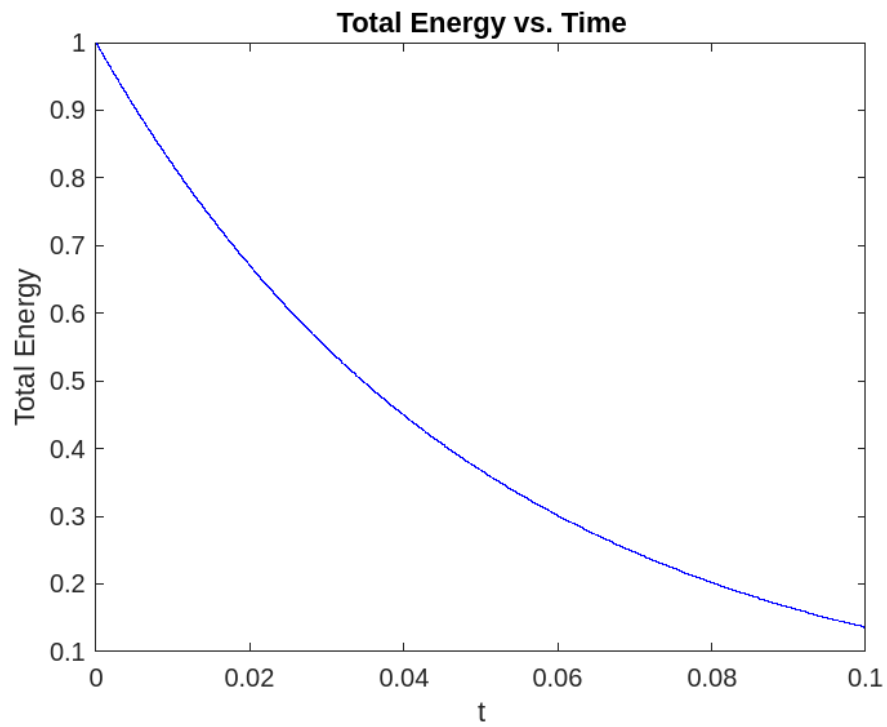
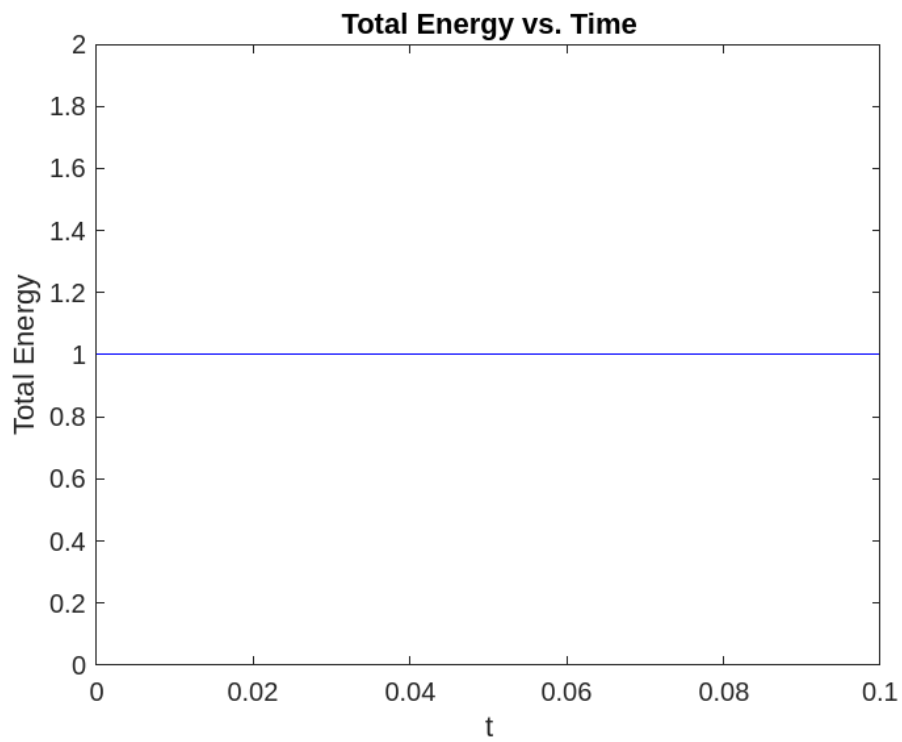


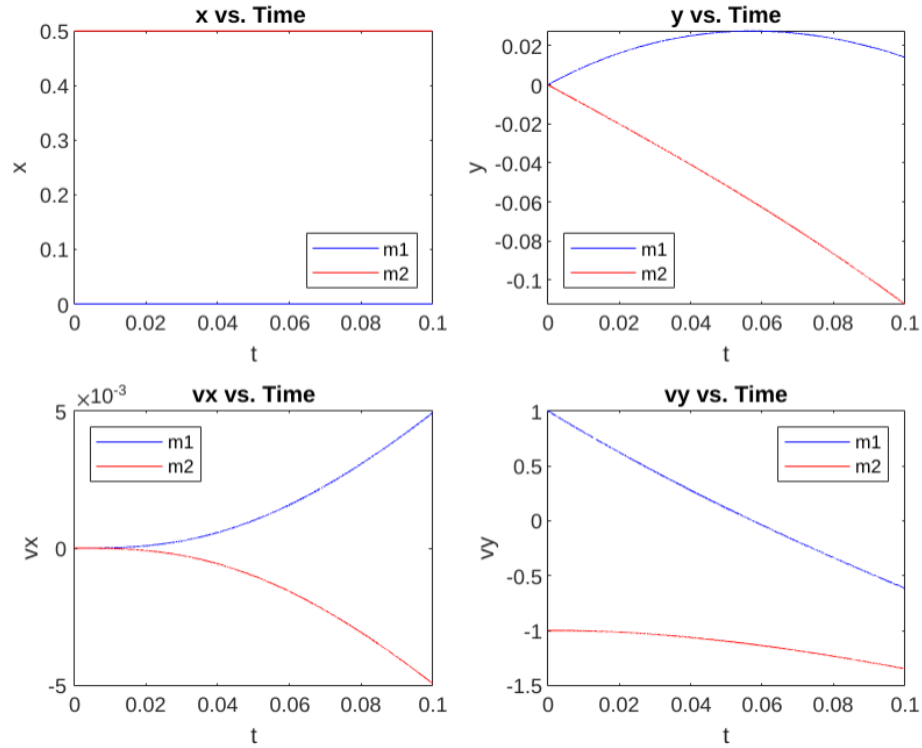
1. Plot of total energy vs time when damping is non zero:



2. Plot of total energy vs time when damping is zero:



### 3. Plot of x, y, vx and vy when damping is non zero



### 4. Plot of x, y, vx and vy when damping is zero

