Print your name: Anup Bagali
Today's date: 10/29/2019
Class period: 3
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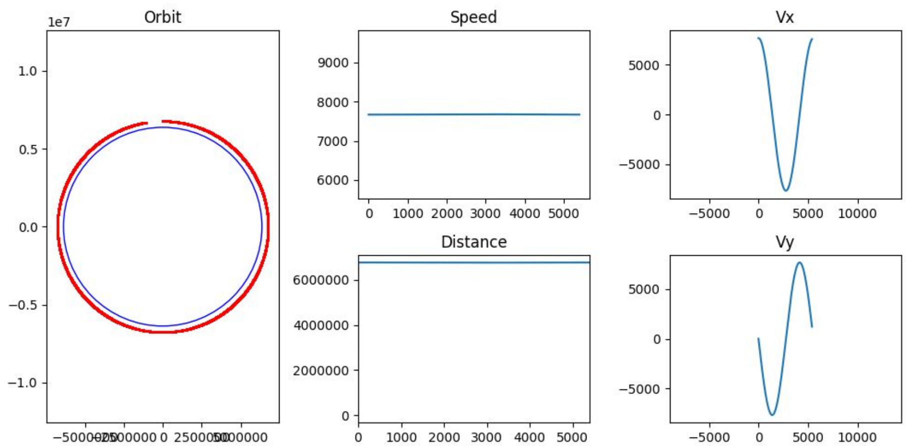
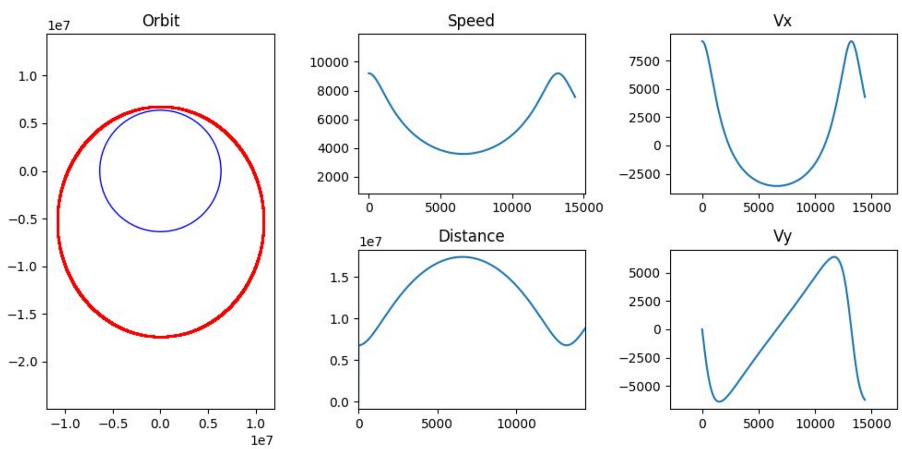
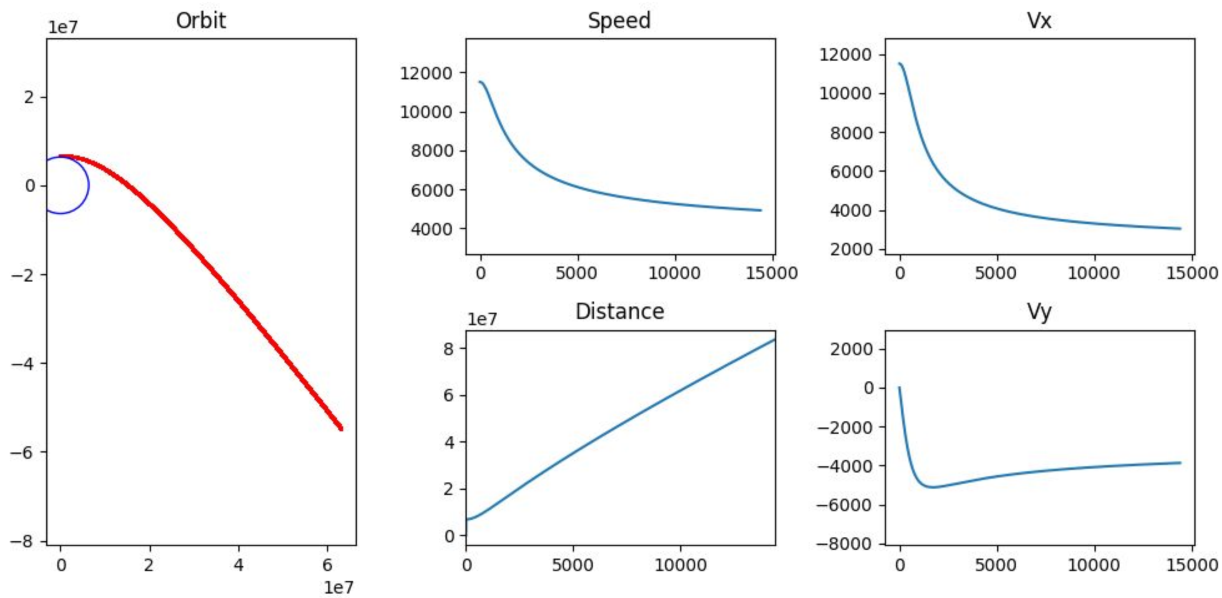
1. Earth and a satellite in orbit.
2. Assume a point mass at the origin not moving.
3. Circular orbit. Duration is 90 minutes.
4. Initialize y = R + 400 km, and vx = sqrt(G*M / y).
5. Loop, update position and velocity each DT timestep.
6. Plot trajectory, and speed and distance over time.
7. Can include surface of Earth in trajectory plot too.



8. Elliptical orbit, vx + 20%, duration 4 or 5 hours.
9. Same plots, but include vx and vy over time as well.



10. Hyperbolic orbit, vx + 50%, x and y farther away.



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