Peer Review Worksheet

Make a private copy of this worksheet and give it a useful filename. Be sure to upload the worksheet in PDF format as an in-class activity and provide a copy to the group you are evaluating. Only evaluate work that has been completed (but note incomplete items in the findings as appropriate). Include the worksheet you receive in your own homework submission.

Homework Number:	1
Your Group Number and Members:	April Horton
Group Number and Members to Evaluate:	Andrew

Review Item (in decreasing order of grade weight)	**Finding(s)**	**"Minor" or "Major"?**
Does the code seem to work correctly with expected input and give sensible output?	Problem 1 works really well! It produces the correct values for the energies. Maybe round the energy values to about 2 or 3 sig figs. problem 2 works very nicely and is very easy to follow. While problem 3 does not animate yet, the plot shows the path of the planets once it will animate.	
If applicable, does the code seem to handle invalid input? Is there a usage message?	Problem 2: There are no messages that pop up when invalid numbers are entered. I tried (1,2,3) and it returns (nan, nan). Add something to catch when an invalid value is encountered in the square root. Problem 1: when a negative value for A is given, the program returns an imaginary binding energy value. Part C struggles with negative values	Minor
Are the answers to questions readable and well organized? If not, make suggestions.	The answers are well-organized and included as a markdown cell after the program. I would suggest adding a markdown cell under part c of problem 2 to explain what makes those roots the best solutions.	minor
Are all the plots appropriately labeled and readable? If not, make suggestions.	Problem 1: make the tick marks larger, make the text on the plot that says "Max @ z = 2" larger. Maybe color code the data with a colormap that scales with the points location on the plot. Problem 3: use plt.style.use('dark_background') which makes the background dark.	minor

Problem3; add more comments for when you are calling the Planet class, maybe say "mercury has a radius of 2440 km, its orbital radius is 57.9 million km, and its period is 88days.". Otherwise it may be confusing where these numbers are coming from.

Can the code documentation be improved (including comments and file headers)?	Problem 2; While the Quadratic equation seems straightforward, describe how the two versions differ in your explanation. Also, explain why part C has the best solutions. What makes those two roots the best solutions? Problem 3: I am not sure what C1 and C2 are in the run_simulation definition. is it the time steps?	minor
Can the code readability be improved? Give suggestions.	I really like how the problems are divided and labelled with the larger headers. It makes the code easy to follow.	
Does the code seem efficient in style and performance? If not, what is the concern?	I really like the way you organized problem3. This method excludes the use of an outside txt file or lots of variables defining all of the properties. Problem 1; very efficient especially for part C. I like the if statement inside the for loop as this gets rid of the need for appending to lists multiple times. Good job!	
Does the submission contain a descriptive README file?	NA	
Were you able to compile/run the code according to the instructions in the README?	NA	
Does the submission appear to otherwise meet requirements and not contain unnecessary files? If not, explain.	yes! It meets the requirements except for the animation.	Minor

How many minor issues did you identify?	5
How many major issues did you identify?	None