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Orbital Parameters of Planets

Several centuries ago, astronomers studied the nightsky in order to understand the celestial dynamics of planets, using equipment that by today's standards would be considered primitive. The goal of this project will be to re-derive these known parameters (mostly the orbital period) using the modern tools of today. Rather than manually measuring the positions of planets in the sky over a long period of time with a sextant, you will be allowed to generate this data with our current knowledge of ephemeris. This should ensure that no human error is introduced by your mearurement. Once you get the positional data points for various planets, will you will have to re-calculate their orbital periods and see how good your method is.

The exact method to use is left to your discretion, but you will have to show the precision obtained using different number of points in the orbits. At the end of this project, you should be able to present your results and show how they compare to the older results, and give a summary of how this was done, and what were the key milestones achieved over the years. A brief history of how this was done over the last centuries is expected in your report.