

Machine Learning Tarea #6

Herman Jaramillo Villegas
Universidad de Medellín

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Planet	Period	Mean radius
Mercury	0.241	0.39
Venus	0.615	0.72
Earth	1.0	1.0
Mars	1.88	1.52
Jupiter	11.8	5.20
Saturn	29.5	9.54
Uranus	84.0	19.18
Neptune	165.0	30.06
Pluto	248.0	39.44

Figure 1: Table of temporal periods (in years) versus radii (in AU) of planets in the solar system.

Rediscover Kepler's third law. Use the table shown in 1 and equation

$$T(r, \theta) = \alpha r^{\theta_1},$$

where α and θ_1 are parameters which should be found using linear regression. Here r is the mean distance ("radius") from the planet to the sun, and T is the period in units of years period. *hint: Use a function to make this into a linear equation and use the techniques developed in class for linear equations.* Please sent a PDF from `Python` or, if it is easier for you, send a Jupyter notebook with extension `ipynb`.