## **Project Assignment 2**

Title: Research Project Dataset Selection and Research Questions

Dataset for final Project: Meteorite\_Landings.csv

a. Briefly describe why you selected the dataset; what is your interest in the topic/domain

Meteorites are nothing but the rocks (both tiny and large) from space that land on Earth's surface by surviving the atmosphere along its way. I have selected this domain because there are many mysteries of meteorites about where they come from, how they got here, where actually they are landing, and what they tell us about the solar system and the life that existed so far. The other reason is my curiosity to explore this topic and get information of how actually we landed here to some extent.

- b. State at least 3 well-formulated research questions that could be answered by exploring the dataset
- 1. On what kind of meteorite origin (if they are from Mars/ Moon/ Asteroid belt between Jupiter and Mars/ Comets) the scientists must focus on to find the history behind the building blocks of planets and life?
- 2. What is the impact of Meteorite mass (weight) on different parts of Earth?
- 3. How often do the Meteorites hit the Earth?
- 4. In which part of the world most Meteorites Fell/Found and what factors influence their occurrence in particular areas?
- 5. Is there any trend on the fall of the Meteorite in different months?
- c. Briefly explain the potential benefits of answering the research questions (i.e., why is it important to study the dataset?)

It is important to study this dataset in order to find the mysteries of meteorites.

The potential benefits of answering the corresponding research questions (as above)

- 1. The First question can help the scientists, on what kind of meteorite origin they must focus on to find the history behind the building blocks of planets and life
- 2. The Second question helps to find how big the craters are formed in different parts of the Earth based on the weight of the Meteorite and know if there are is any actual loss/trouble to the people because of the craters
- 3. The third one, can help to find if there is any pattern for the meteorites hitting the planet across different years.

- 4. Fourth Question helps to find out where most meteorites are found in particular places and what are the factors that influence their occurrence in particular areas
- 5. Fifth Question helps scientists to see if most meteorites are falling in any specifc month and find reasons behind this occurrence through research
- d. Provide a proper citation for the source of the dataset

nasa-data. (2015-07-20). Meteorite Landings. Washington, D.C., VA: data.nasa.gov. <a href="https://data.nasa.gov/d/gh4g-9sfh">https://data.nasa.gov/d/gh4g-9sfh</a>

NASA Scientists and Teachers from local schools. (August 1997). Exploring Meteorite Mysteries. Washington, D.C., VA: Houston, TX. <a href="mailto:Exploring\_Meteorite\_Mysteries.pdf">Exploring\_Meteorite\_Mysteries.pdf</a> (nasa.gov)