**HEAVENLY BODIES DATABASE**

A database containing records of various objects like planets, stars, satellites and various other objects present in the universe.

**Tables:**

The database will consist of the following tables (the possible attributes are mentioned in the brackets) :

1. **Star** (Name[Primary key], Radius, Mass, Max. Temp., Min. Temp., Type, Constellation, Age, Size)
2. **Planet** (Name[Primary key], Radius, Mass, Max. Temp., Min. Temp., Host Star, Orbital Period, Dis. From host star, Rotation period, Rings)
3. **Satellite** (Name[Primary key], Radius, Mass, Max. Temp., Min. Temp., Host Planet, Orbital Period, Dis. From host planet, Rotation period)
4. **Constellation** (Name[Primary key], Total Stars, Visibility period, Visibility region, brightest star, origin, meaning)
5. **Major Gases**  (Planet name, Star name, Oxygen, Carbon di-oxide, Methane, Ammonia, Hydrogen, Helium, Neon)
6. **Other Small Objects [may contain asteroids, comets etc. as its subclass]** (Attributes will depend on the subclasses contained in the table)

**Queries:**

Some of the queries which can be used to get data from the database are:

1. A planet orbits which star
2. A satellite orbits which planet
3. A star belongs to which constellation
4. The atmosphere of the planet contains which major gases
5. The planet (if it’s a Jovian) is made up of which major gases
6. The star is made up of which type of gases
7. Region of Goldilocks zone around the planet
8. Has the planet or other object ever been visited by a satellite (i.e. artificial satellite)
9. When the planet will die based on its type and its age

10)Getting a list of the biggest or the smallest objects in a particular order

11) A star is visible from a particular region or not

12) If a star is visible, what is its visibility period

13) Getting an ordered list of hottest bodies

14) What major gases are present in the host star of a planet

15) Numerous other basic queries like arranging the records in a

particular order based on various fields of the tables

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