|  |  |  |
| --- | --- | --- |
| **TABLE Universe** ( | | |
| Universal Name: | CHAR (30) |  |
| Age: | REAL |  |
| Expansionary Rate: | REAL |  |
| PRIMARY KEY (Universal Name) | | |
| ) | | |

|  |  |  |
| --- | --- | --- |
| **TABLE Galaxy** ( | | |
| Galactic Name: | CHAR (30) |  |
| Primary Composition: | CHAR (30) |  |
| Type: | CHAR (20) |  |
| Diameter: | REAL |  |
| PRIMARY KEY (Galactic Name) | | |
| ) | | |

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| **TABLE Planetary System** ( | | |
| Host Name: | CHAR (30) |  |
| Number of Stars: | INT |  |
| Number of Planets: | INT |  |
| Radius: | REAL |  |
| Host: | CHAR (30) | NOT NULL |
| PRIMARY KEY (Host Name) | | |
| FOREIGN KEY (Host) REFERENCES Galaxy | | |
| ) | | |

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| **TABLE Quasar** ( | | |
| Quasar Name: | CHAR (30) |  |
| Spectral Redshift: | REAL |  |
| Distance From Earth: | REAL |  |
| Luminosity: | REAL |  |
| PRIMARY KEY (Quasar Name) | | |
| ) | | |

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| **TABLE Star** ( | | |
| Solar Name: | CHAR (30) |  |
| Spectral Type: | CHAR (8) |  |
| Radius: | REAL |  |
| Elemental Composition: | CHAR (30) |  |
| Discovery Year: | INT |  |
| Host: | CHAR (30) | NOT NULL |
| PRIMARY KEY (Solar Name) | | |
| FOREIGN KEY (Host) REFERENCES Planetary System | | |
| ) | | |

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| --- | --- | --- |
| **TABLE Exoplanet** ( | | |
| Planetary Name: | CHAR (30) |  |
| Radius: | REAL |  |
| Duration of Day: | REAL |  |
| Planetary Type: | CHAR (30) |  |
| Biosphere: | INT |  |
| Discovery Year: | INT |  |
| Host: | CHAR (30) | NOT NULL |
| PRIMARY KEY (Planetary Name) | | |
| FOREIGN KEY (Host) REFERENCES Star | | |
| ) | | |

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| --- | --- | --- |
| **TABLE Orbits\_Star** ( | | |
| Planetary Name: | CHAR (30) |  |
| Sol Name: | CHAR (30) | NOT NULL |
| Orbital Period | REAL |  |
| PRIMARY KEY (Planetary Name) | | |
| FOREIGN KEY (Planetary Name) REFERENCES Exoplanet | | |
| FOREIGN KEY (Sol Name) REFERENCES Star | | |
| ) | | |

|  |  |  |
| --- | --- | --- |
| **TABLE Moon** ( | | |
| Lunar Name: | CHAR (30) |  |
| Radius: | REAL |  |
| Tidal Lock: | INT |  |
| Core Composition: | CHAR (30) |  |
| Discovery Year: | INT |  |
| Host: | CHAR (30) | NOT NULL |
| PRIMARY KEY (Lunar Name) | | |
| FOREIGN KEY (Host) REFERENCES Exoplanet | | |
| ) | | |

|  |  |  |
| --- | --- | --- |
| **TABLE Orbits\_Planet** ( | | |
| Lunar Name: | CHAR (30) |  |
| Planetary Name: | CHAR (30) | NOT NULL |
| Orbital Period: | REAL |  |
| PRIMARY KEY (Lunar Name) | | |
| FOREIGN KEY (Lunar Name) REFERENCES Moon | | |
| FOREIGN KEY (Planetary Name) REFERENCES Exoplanet | | |
| ) | | |

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| **TABLE Biome** ( | | |
| Biome Type: | CHAR (30) |  |
| Average Temperature: | REAL |  |
| Ecological Composition: | CHAR (20) |  |
|  |  |  |
| PRIMARY KEY (Biome Type) | | |
| … | | |
| ) | | |

|  |  |  |
| --- | --- | --- |
| **TABLE Ecosystem** ( | | |
| Planetary Name: | CHAR (30) |  |
| Biome Type: | CHAR (30) |  |
|  |  |  |
|  |  |  |
| PRIMARY KEY (Planetary Name, Biome Type) | | |
| FOREIGN KEY (Planetary Name) REFERENCES Exoplanet | | |
| FOREIGN KEY (Biome Type) REFERENCES Biome | | |
| ) | | |

|  |  |  |
| --- | --- | --- |
| **TABLE Kingdom** ( | | |
| Phylum: | CHAR (30) |  |
| Trophic Level: | CHAR (40) |  |
| Cellular Structure: | CHAR (20) |  |
|  |  |  |
| PRIMARY KEY (Phylum) | | |
| FOREIGN KEY (Planetary Name, Biome Type) REFERENCES Ecosystem | | |
| ) | | |

|  |  |  |
| --- | --- | --- |
| **TABLE Has\_Kingdom** ( | | |
| Phylum: | CHAR (30) |  |
| Planetary Name: | CHAR (30) |  |
| Biome Type: | CHAR (30) |  |
|  |  |  |
| PRIMARY KEY (Phylum, Planetary Name, Biome Type) | | |
| FOREIGN KEY (Phylum) REFERENCES Kingdom | | |
| FOREIGN KEY (Planetary Name, Biome Type) REFERENCES Ecosystem | | |
| UNIQUE (Phylum, Planetary Name, Biome Type) | | |
| ) | | |