# Set 4 - Assignments on Creating Tables

MainBridge Systems Inc., has contracted your company to automate their Resource Management System currently done using Spreadsheets. The automated system would provide them scalability and also enable them to port it to high-end technologies.

Resource refers to personnel, hardware, software, and any other infrastructure that are necessary for executing a project. Resource management in this context deals with managing personnel utilization.

**Create the following tables. Apply Data Integrity Rules such as Primary Key, Foreign Key, Unique Key, Not Null, Check constraints and Default values as per requirement.**

**Also add at least 8 to 10 meaningful records in each table.**

**Display outputs using at least 3 to 4 meaningful select statements which will include techniques such as Joins, Group By, Sub Queries, Derived Tables, Window functions, Case functions etc.**

The database architect has provided with the table structures for the application.

# SCHEDULER\_lOGIN TABLE

|  |  |
| --- | --- |
| Scheduler\_Name | Varchar(30) |
| Password | Varchar(30) |

# Employee tABLE

|  |  |
| --- | --- |
| Column Name | Data type |
| Employee\_ID | Number(9) |
| Employee\_Name | Varchar(30) |
| DOB | Date |
| DOJ | Date |
| Qualification | Varchar(50) |
| Experience | Number(2) |
| Skill\_ID | Varchar(100) |
| Technology | Varchar(100) |
| Grade | Varchar(5) |
| Designation | Varchar(50) |
| Resource\_Status | Varchar(20) |
| Project\_ID | Number(9) |

# Project\_MASTER tABLE

|  |  |
| --- | --- |
| Column Name | Data type |
| Project\_ID | Number(9) |
| Project\_Name | Varchar(100) |
| BHU (Business Handling Unit) | Varchar(20) |
| Location | Varchar(20) |
| DUL (DU Lead) (Hint :this is the employee ID) | Number(9) |
| Start\_Date | Date |
| Expected\_End\_Date | Date |

# Project\_DETAILS tABLE

|  |  |
| --- | --- |
| Column Name | Data type |
| Project\_ID | Number(9) |
| Skill\_Id | Number(3) |
| Technology | Varchar(20) |
| Start\_Date | Date |
| Expected\_End\_Date | Date |
| Number\_Of\_Resources | Number(1) |
| Skill\_Status | Varchar(1) |

**PROJECT\_Schedule\_MASTER TABLE**

|  |  |
| --- | --- |
| Column Name | Data type |
| Schedule\_ID | Number |
| Project\_ID | Number(3) |
| Project\_Name | Varchar(100) |
| Start\_Date | Date |
| Expected\_End\_Date | Date |
| Requirement Requestor\*\*(RR\_Name) | Varchar(20) |
| RR\_EnterpriseId | Varchar(20) |
| RR\_PhoneNo | Varchar(15) |

**PROJECT\_ScheduLE\_DETAILS TABLE**

|  |  |
| --- | --- |
| Column Name | Data type |
| Schedule\_ID | Number |
| Skill\_ID | Number |
| Number\_Of\_Resources | Number |
| Employee\_ID | Number |
| Employee\_Name | Varchar(20) |
| Designation | Varchar(50) |
| Start\_Date | Date |
| Expected\_End\_Date | Date |
| Resource\_Status | Varchar |

**SKILL TABLE**

|  |  |
| --- | --- |
| Column Name | Data type |
| Skill\_Id | Number(3) |
| Technology | Varchar(100) |

**GRADE TABLE**

|  |  |
| --- | --- |
| Column Name | Data type |
| Grade\_ID | Number(3) |
| Grade | Number (3) |
| Designation | Varchar(30) |