**SQL Assignment - Set 2**

# **Common Instructions**

1. For character data type either char or varchar should be taken as per the case and appropriate size should be given.
2. Enter at least 2 records to ensure the validity of data types, size and constraints.
3. If the table with the same name already exists in your schema, then do not drop it. Provide some different name for your table.
4. Create the table student\_master with the following specifications

| **Column Name** | **Data type** | **Constraints and other details** |
| --- | --- | --- |
| Rollno | Numeric | Primary Key |
| Name | Character | Cannot be empty |
| City | Character | By default, it should be Mumbai. |
| Marks | Numeric | Cannot be less than 0 and cannot exceed 100 |
| Invoice\_No | Character | Cannot repeat, but can be blank |

**create table student\_master (**

**rollno int primary key,**

**name varchar(30) not null,**

**city varchar(30) default 'mumbai',**

**marks int check(marks >= 0 and marks <= 100),**

**invoice\_no varchar(30) unique**

**);**

1. Create the table certificate\_details with the following specifications

| **Column Name** | **Data type** | **Constraints and other details** |
| --- | --- | --- |
| Rollno | Numeric | Taken from student\_details table’s rollno. |
| Date\_Of\_Certificate | Date | Cannot be empty |
| Course | Character | Can be Oracle or Power BI or Azure Data Factory |

**create table certificate\_details (**

**rollno int,**

**date\_of\_certificate date not null,**

**course enum('oracle', 'power bi', 'azure data factory'),**

**foreign key (rollno) references student\_master(rollno)**

**);**

1. Create the table First\_Attempt\_Marks with the following specifications

| **Column Name** | **Data type** | **Constraints and other details** |
| --- | --- | --- |
| Rollno | Numeric | Rollno and Subject should make a composite primary key |
| Subject | Character |
| Marks | Numeric | Cannot be empty |

**create table first\_attempt\_marks (**

**rollno int,**

**subject varchar(30),**

**marks int not null,**

**primary key(rollno, subject)**

**);**

1. Create the table First\_Attempt\_Grades with the following specifications

| **Column Name** | **Data type** | **Constraints and other details** |
| --- | --- | --- |
| Rollno | Numeric |  |
| Subject | Character |  |
| Grade | Character | Should be either A or B |
|  |  | Rollno and Subjects should be taken from First\_Attempt\_Marks |

**create table first\_attempt\_grades (**

**rollno int,**

**subject varchar(30),**

**grade enum('A','B'),**

**foreign key(rollno, subject) references first\_attempt\_marks(rollno, subject)**

**);**

1. Create the table cost\_analysis with the following specifications

| **Column Name** | **Data type** | **Constraints and other details** |
| --- | --- | --- |
| Company\_ID | Numeric | Primary Key |
| Company\_Name | Character | Cannot be empty |
| Export\_Cost | Numeric |  |
| Import\_Cost | Numeric |  |
| *Import\_Cost should always be greater the or equal to 40% of the export\_*cost | | |

**create table cost\_analysis (**

**company\_id int primary key,**

**company\_name varchar(30) not null,**

**export\_cost int,**

**import\_cost int,**

**check (ifnull(import\_cost,0) >= 0.4\*ifnull(export\_cost,0))**

**);**

1. Create the table Salesman\_Data with the following specifications

| **Column Name** | **Data type** | **Constraints and other details** |
| --- | --- | --- |
| Salesman\_ID | Numeric | Primary Key |
| Salesman\_Name | Character | Cannot be blank |
| Area\_Code | Numeric | Cannot repeat |
| Sales\_Amt | Numeric |  |
| Profit\_Amt | Numeric |  |
| *Either Sales\_Amt should be above 5000* ***OR*** *Profit\_Amt should be above 700.* | | |

**create table salesman\_data (**

**salesman\_id int primary key,**

**salesman\_name varchar(30) not null,**

**area\_code int unique,**

**sales\_amt int,**

**profit\_amt int,**

**check(sales\_amt > 5000 or profit\_amt > 700)**

**);**