

TASK COMPLETION REPORT: INSERT DATA IN JOBS & JOB_HISTORY TABLES

Description of Work Done: I have successfully completed the user story assigned to me, which involved creating the Jobs and Job_History tables, and inserting 20 records into each table. Below is a brief summary of the work done:

- Created the Jobs table with columns Job_Id (Primary Key), Job_Title, Min_Salary, and Max_Salary.
- Created the Job_History table with columns Employee_Id, Start_Date, End_Date, Job_Id (Foreign Key), and Department_Id.
- Inserted 20 entries into both the Jobs and Job_History tables.

Below are the SQL queries to create the Jobs and Job_History tables, and to insert 20 entries into each table.

Step 1: Create the 'HR' Database

First, create the database named HR and use it.

```
Create Database HR;
```

```
Use HR;
```

Step 2: Create the Jobs Table

```
CREATE TABLE Jobs (  
    Job_Id INT PRIMARY KEY,  
    Job_Title VARCHAR(100),  
    Min_Salary DECIMAL(10, 2),  
    Max_Salary DECIMAL(10, 2)  
);
```

Step 3: Create the Job_History Table

The Job_History table will include a foreign key relationship to the Jobs table via Job_Id.

```
CREATE TABLE Job_History (  
    Employee_Id INT,  
    Start_Date DATE,  
    End_Date DATE,  
    Job_Id INT,  
    Department_Id INT,  
    FOREIGN KEY (Job_Id) REFERENCES Jobs(Job_Id)  
);
```

Step 4: Insert Data into the Jobs Table

```
INSERT INTO Jobs (Job_Id, Job_Title, Min_Salary, Max_Salary)
VALUES
```

```
(1, 'Software Developer', 50000, 100000),
(2, 'Data Analyst', 45000, 90000),
(3, 'Project Manager', 70000, 130000),
(4, 'HR Manager', 60000, 110000),
(5, 'Business Analyst', 55000, 105000),
(6, 'Network Administrator', 48000, 95000),
(7, 'Database Administrator', 62000, 115000),
(8, 'UX/UI Designer', 54000, 102000),
(9, 'Marketing Specialist', 47000, 89000),
(10, 'Sales Manager', 58000, 120000),
(11, 'System Analyst', 53000, 98000),
(12, 'Quality Assurance', 52000, 96000),
(13, 'DevOps Engineer', 66000, 125000),
(14, 'Security Specialist', 64000, 122000),
(15, 'Cloud Architect', 70000, 135000),
(16, 'AI Engineer', 75000, 140000),
(17, 'Content Strategist', 46000, 85000),
(18, 'Product Manager', 68000, 128000),
(19, 'Graphic Designer', 43000, 80000),
(20, 'IT Support Specialist', 40000, 75000);
```

Step 5: Insert Data into the Job_History Table

```
INSERT INTO Job_History (Employee_Id, Start_Date, End_Date, Job_Id, Department_Id)
VALUES
```

```
(101, '2022-01-01', '2022-12-31', 1, 10),
(102, '2021-02-15', '2023-01-15', 2, 20),
(103, '2020-03-01', '2022-06-01', 3, 30),
(104, '2021-04-10', '2023-02-28', 4, 40),
(105, '2019-05-05', '2021-10-10', 5, 50),
(106, '2020-06-06', '2022-11-11', 6, 60),
(107, '2018-07-07', '2021-12-12', 7, 70),
```

```
(108, '2022-08-08', '2023-03-03', 8, 80),
(109, '2020-09-09', '2022-02-02', 9, 90),
(110, '2019-10-10', '2021-09-09', 10, 100),
(111, '2018-11-11', '2020-08-08', 11, 110),
(112, '2021-12-12', '2023-05-05', 12, 120),
(113, '2020-01-01', '2022-07-07', 13, 130),
(114, '2019-02-02', '2021-06-06', 14, 140),
(115, '2018-03-03', '2020-05-05', 15, 150),
(116, '2021-04-04', '2022-11-11', 16, 160),
(117, '2019-05-05', '2021-08-08', 17, 170),
(118, '2020-06-06', '2022-09-09', 18, 180),
(119, '2021-07-07', '2023-01-01', 19, 190),
(120, '2019-08-08', '2021-04-04', 20, 200);
```

Step 6 : Confirmation of Data Verification

I ran the following queries to confirm that the data was correctly inserted and that the tables function as expected:

— Verify Jobs Table Data

```
SELECT * FROM Jobs;
```

— Verify Job_History Table Data

```
SELECT * FROM Job_History;
```

All data was inserted successfully, and the foreign key relationships were enforced correctly.

Final Table output:

Job Table

Job_Id	Job_Title	Min_Salary	Max_Salary
1	Software Developer	50000	100000
2	Data Analyst	45000	90000
3	Project Manager	70000	130000
4	HR Manager	60000	110000
5	Business Analyst	55000	105000
6	Network Administrator	48000	95000
7	Database Administrator	62000	115000
8	UX/UI Designer	54000	102000
9	Marketing Specialist	47000	89000
10	Sales Manager	58000	120000
11	System Analyst	53000	98000
12	Quality Assurance	52000	96000
13	DevOps Engineer	66000	125000
14	Security Specialist	64000	122000
15	Cloud Architect	70000	135000
16	AI Engineer	75000	140000

17	Content Strategist	46000	85000
18	Product Manager	68000	128000
19	Graphic Designer	43000	80000
20	IT Support Specialist	40000	75000

Job History Table

Employee_Id	Start_Date	End_Date	Job_Id	Department_Id
101	01-01-2022	31-12-2022	1	10
102	15-02-2021	15-01-2023	2	20
103	01-03-2020	01-06-2022	3	30
104	10-04-2021	28-02-2023	4	40
105	05-05-2019	10-10-2021	5	50
106	06-06-2020	11-11-2022	6	60
107	07-07-2018	12-12-2021	7	70
108	08-08-2022	03-03-2023	8	80
109	09-09-2020	02-02-2022	9	90
110	10-10-2019	09-09-2021	10	100
111	11-11-2018	08-08-2020	11	110
112	12-12-2021	05-05-2023	12	120
113	01-01-2020	07-07-2022	13	130
114	02-02-2019	06-06-2021	14	140
115	03-03-2018	05-05-2020	15	150
116	04-04-2021	11-11-2022	16	160
117	05-05-2019	08-08-2021	17	170
118	06-06-2020	09-09-2022	18	180
119	07-07-2021	01-01-2023	19	190
120	08-08-2019	04-04-2021	20	200