**DATA COMPLETION REPORT TO CHECK WHETHER NULL VALUES OR NEGATIVE VALUES EXIST IN DATA TABLES**

Work Description: I have successfully completed the user story assigned to me, which involved to check for null or negative values in all the data tables created such as Job Table, Job History Table and Employees Table.

## 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 | |

## Below are the SQL queries to check for NULL or NEGATIVE values in Job Table:

## Step 1: Check all the columns in the table:

First, check all the columns present in the table

**Job\_Id**: Should not be null.

**Job\_Title**: Should not be null.

**Min\_Salary**: Should not be null and should not have negative values.

**Max\_Salary**: Should not be null and should not have negative values.

### Step 2: Write SQL Query for NULL Values:

### SELECT Job\_Id, Job\_Title, Min\_Salary, Max\_Salary

### FROM Job

### WHERE Job\_Id IS NULL

### OR Job\_Title IS NULL

### OR Min\_Salary IS NULL

### OR Max\_Salary IS NULL;

### Step 3: Write SQL Query for NEGATIVE VALUES:

### Use ‘<0’ to identify NEGATIVE condition for Min & Max Salaries:

### SELECT Job\_Id, Job\_Title, Min\_Salary, Max\_Salary

### FROM Job

### WHERE Min\_Salary < 0

### OR Max\_Salary < 0;

### Step 4: Combine Both the Queries Together:

### SELECT Job\_Id, Job\_Title, Min\_Salary, Max\_Salary

### FROM Job

### WHERE Job\_Id IS NULL

### OR Job\_Title IS NULL

### OR Min\_Salary IS NULL

### OR Max\_Salary IS NULL

### OR Min\_Salary < 0

### OR Max\_Salary < 0;

**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 |

## Step 1: Check all the columns in the table:

**Employee\_Id**: Should not be null and negative values

**Start\_Date**: Should not be null.

**End\_Date**: Should not be null.

**Job\_Id**: Should not be null and should not have negative values.

**Department\_Id**: Should not be null and should not have negative values

## Step 2: Write SQL Query for NULL Values:

### SELECT Employee\_Id, Start\_Date, End\_Date, Job\_Id, Department\_Id

### FROM Job\_History

### WHERE Employee\_Id IS NULL

### OR Start\_Date IS NULL

### OR End\_Date IS NULL

### OR Job\_Id IS NULL

### OR Department\_Id IS NULL;

### Step 3: Write SQL Query for NEGATIVE VALUES:

### Use ‘<0’ to identify NEGATIVE condition for Job\_Id & Department\_Id:

### SELECT Employee\_Id, Start\_Date, End\_Date, Job\_Id, Department\_Id

### FROM Job\_History

### WHERE Job\_Id < 0

### OR Department\_Id < 0;

### Step 4: Combine Both the Queries Together:

### SELECT Employee\_Id, Start\_Date, End\_Date, Job\_Id, Department\_Id

### FROM Job\_History

### WHERE Employee\_Id IS NULL

### OR Start\_Date IS NULL

### OR End\_Date IS NULL

### OR Job\_Id IS NULL

### OR Department\_Id IS NULL

### OR Job\_Id < 0

### OR Department\_Id < 0;

### EMPLOYEES TABLE

### |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Employee\_ID | FirstName | LastName | Phone\_No | Email | Manager\_ID | Job\_ID | Salary | Hire\_Date |
| 101 | John | Doe | 123-456-7890 | john.doe@example.com | 101 | 1 | 75000 | 2021-01-15 |
| 102 | Jane | Smith | 123-456-7891 | jane.smith@example.com | 102 | 2 | 65000 | 2021-02-20 |
| 103 | Michael | Johnson | 123-456-7892 | michael.johnson@example.com | 103 | 3 | 70000 | 2021-03-22 |
| 104 | Patricia | Williams | 123-456-7893 | patricia.williams@example.com | 104 | 4 | 72000 | 2021-04-10 |
| 105 | Robert | Brown | 123-456-7894 | robert.brown@example.com | 105 | 5 | 68000 | 2021-05-05 |
| 106 | Linda | Jones | 123-456-7895 | linda.jones@example.com | 106 | 6 | 69000 | 2021-06-15 |
| 107 | William | Garcia | 123-456-7896 | william.garcia@example.com | 107 | 7 | 71000 | 2021-07-25 |
| 108 | Elizabeth | Martinez | 123-456-7897 | elizabeth.martinez@example.com | 108 | 8 | 75000 | 2021-08-30 |
| 109 | David | Hernandez | 123-456-7898 | david.hernandez@example.com | 109 | 9 | 67000 | 2021-09-10 |
| 110 | Barbara | Lopez | 123-456-7899 | barbara.lopez@example.com | 110 | 10 | 76000 | 2021-10-15 |
| 111 | Richard | Gonzalez | 123-456-7800 | richard.gonzalez@example.com | 111 | 11 | 74000 | 2021-11-20 |
| 112 | Susan | Wilson | 123-456-7801 | susan.wilson@example.com | 112 | 12 | 73000 | 2021-12-25 |
| 113 | Joseph | Anderson | 123-456-7802 | joseph.anderson@example.com | 113 | 13 | 72000 | 2022-01-05 |
| 114 | Margaret | Thomas | 123-456-7803 | margaret.thomas@example.com | 114 | 14 | 71000 | 2022-02-10 |
| 115 | Charles | Taylor | 123-456-7804 | charles.taylor@example.com | 115 | 15 | 70000 | 2022-03-15 |
| 116 | Jessica | Moore | 123-456-7805 | jessica.moore@example.com | 116 | 16 | 78000 | 2022-04-20 |
| 117 | Christopher | Jackson | 123-456-7806 | christopher.jackson@example.com | 117 | 17 | 74000 | 2022-05-25 |
| 118 | Karen | Martin | 123-456-7807 | karen.martin@example.com | 118 | 18 | 73000 | 2022-06-30 |
| 119 | Matthew | Lee | 123-456-7808 | matthew.lee@example.com | 119 | 19 | 71000 | 2022-07-10 |
| 120 | Ashley | Perez | 123-456-7809 | ashley.perez@example.com | 120 | 20 | 72000 | 2022-08-15 |

## Below are the SQL queries to check for NULL or NEGATIVE values in Employees Table:

## Step 1: Check all the columns in the table:

**Employee\_ID**: Should not be null and should not have negative values.

**FirstName**: Should not be null.

**LastName**: Should not be null.

**Phone\_No**: Should not be null.

**Email**: Should not be null.

**Manager\_ID**: Should not be null and should not have negative values.

**Job\_ID**: Should not be null and should not have negative values.

**Salary**: Should not be null and should not have negative values.

**Hire\_Date**: Should not be null

## Step 2: Write SQL Query for NULL Values:

### SELECT Employee\_ID, FirstName, LastName, Phone\_No, Email, Manager\_ID, Job\_Id, Salary, Hire\_Date

### FROM Job\_Employees

### WHERE Employee\_Id IS NULL

### OR FirstName IS NULL

### OR LastName IS NULL

### OR Phone\_No IS NULL

### OR Email IS NULL

### OR Manager\_ID IS NULL

### OR Job\_ID IS NULL

### OR Salary IS NULL

### OR Hire\_Date IS NULL;

### Step 3: Write SQL Query for NEGATIVE VALUES:

### Use ‘<0’ to identify NEGATIVE condition for Employee\_ID, Manager\_ID, Job\_ID & Salary Columns:

### SELECT Employee\_ID, FirstName, LastName, Phone\_No, Email, Manager\_ID, Job\_Id, Salary, Hire\_Date

### FROM Job\_Employees

### WHERE Employee\_ID <0

### OR Manager\_ID <0

### OR Job\_ID <0

### OR Salary <0;

### Step 4: Combine Both the Queries Together:

### SELECT Employee\_ID, FirstName, LastName, Phone\_No, Email, Manager\_ID, Job\_Id, Salary, Hire\_Date

### FROM Job\_Employees

### WHERE Employee\_Id IS NULL

### OR FirstName IS NULL

### OR LastName IS NULL

### OR Phone\_No IS NULL

### OR Email IS NULL

### OR Manager\_ID IS NULL

### OR Job\_ID IS NULL

### OR Salary IS NULL

### OR Hire\_Date IS NULL

### OR Employee\_ID <0

### OR Manager\_ID <0

### OR Job\_ID <0

### OR Salary <0;