Microsoft SQL Server Management Studio Exercises

There are two tables within the UIA database. Table 1 is **Claimant\_Info** and Table 2 is **Claim\_Info**. The tables can be joined by the **Claimant ID** column.

Disclaimer: the information in these tables is fictitious and does not contain any confidential information.

Table 1: **Claimant\_Info**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Claimant\_ID | Name | Birthdate | Gender | City | County | State |
| 4444 | Alex Smith | 9/14/1998 | NULL | Sierra Vista | Cochise | AZ |
| 4567 | John Smith | 2/18/1999 | Male | Warren | Macomb | MI |
| 4566 | Tony Kenny | 2/3/1975 | Male | Roseville | Macomb | MI |
| 2324 | Dennis Nelson | 5/20/1961 | Male | Eastpointe | Macomb | MI |
| 1234 | Jane Doe | 12/30/2001 | Female | Pontiac | Oakland | MI |
| 9222 | Karen Carey | 12/10/1981 | Female | Southfield | Oakland | MI |
| 7887 | Mandy Shoe | 5/20/1965 | Female | Royal Oak | Oakland | MI |
| 2387 | Riley Boone | 2/16/1943 | NULL | Angola | Steuben | IN |
| 7890 | Peter Jones | 2/15/1995 | Male | Detroit | Wayne | MI |
| 8989 | Sally Fields | 10/30/1989 | Female | Detroit | Wayne | MI |
| 4336 | Jesse Johnson | 1/19/1951 | NULL | Inkster | Wayne | MI |

Table 2: **Claim\_Info**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Claim\_ID | Claimant\_ID | File\_Date | Status | Amount\_Paid |
| C100 | 1234 | 4/21/2020 | Denied | $0 |
| C800 | 2324 | 3/30/2021 | Denied | $0 |
| C110 | 2387 | 4/6/2020 | Approved | $37,500 |
| C900 | 4336 | 4/18/2021 | Denied | $0 |
| C210 | 4444 | 11/24/2020 | Denied | $0 |
| C410 | 4444 | 12/3/2021 | Denied | $0 |
| C600 | 4566 | 4/6/2020 | Approved | $40,000 |
| C510 | 4566 | 4/13/2021 | Denied | $0 |
| C710 | 4566 | 4/26/2022 | Approved | $4,500 |
| C220 | 4566 | 11/7/2023 | Denied | $0 |
| C200 | 4567 | 5/9/2020 | Approved | $67,500 |
| C700 | 7887 | 4/8/2020 | Approved | $16,000 |
| C300 | 7890 | 5/16/2022 | Approved | $3,500 |
| C310 | 8989 | 10/31/2019 | Approved | $800 |
| C120 | 8989 | 11/24/2020 | Approved | $50,000 |
| C400 | 8989 | 9/26/2021 | Approved | $3,600 |
| C610 | 8989 | 11/28/2022 | Denied | $0 |
| C420 | 8989 | 9/18/2023 | Approved | $800 |
| C500 | 9222 | 4/22/2021 | Approved | $400 |

For the following questions below, please refer to the background information above.

# Exercise Example 1

## Question

Please write a query using Table 1 to list the claimants that are only in Wayne County, where the desired results of the query are reflected below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Claimant\_ID | Name | Birthdate | Gender | City | County | State |
| 7890 | Peter Jones | 2/15/1995 | Male | Detroit | Wayne | MI |
| 8989 | Sally Fields | 10/30/1989 | Female | Detroit | Wayne | MI |
| 4336 | Jesse Johnson | 1/19/1951 | NULL | Inkster | Wayne | MI |

## Answer:

SELECT \*

FROM Claimant**\_**Info

WHERE County = ‘Wayne’;

# Exercise Example 2

## Question

Please write a query using Table 1 to get the count of claimants for each gender. Because Michigan does not require claimants to report their gender, some claimants have NULL gender values, which is usually categorized as “Unspecified”. The desired results of the query are reflected below.

|  |  |
| --- | --- |
| Gender | Count |
| Female | 4 |
| Male | 4 |
| Null/Unspecified | 3 |

## Answer

SELECT Gender, COUNT(Gender) as Count

FROM Claimant\_Info

GROUP BY Gender;

# Exercise Example 3

## Question

Please write a query using Table 2 to list the *approved* claims filed between the dates of 4/1/2020 and 4/30/2021, which the desired results of the query are reflected below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Claim\_ID | Claimant\_ID | File\_Date | Status | Amount\_Paid |
| C110 | 2387 | 4/6/2020 | Approved | $37,500 |
| C600 | 4566 | 4/6/2020 | Approved | $40,000 |
| C700 | 7887 | 4/8/2020 | Approved | $16,000 |
| C200 | 4567 | 5/9/2020 | Approved | $67,500 |
| C120 | 8989 | 11/24/2020 | Approved | $50,000 |
| C500 | 9222 | 4/22/2021 | Approved | $400 |

## Answer

# SELECT \*

# FROM Claim\_Info

# WHERE Status = 'Approved' AND File\_Date BETWEEN '4/1/2020' AND '4/30/2021';

# Exercise Example 4

## Question

Please write a query using Table 1 and Table 2 to get the sum of the Amount\_Paid for each county in Michigan. The desired results of the query are reflected below.

|  |  |
| --- | --- |
| County | Sum of Amount\_Paid |
| Wayne | $58,700 |
| Oakland | $16,400 |
| Macomb | $112,000 |

## Answer

SELECT County, SUM(Claim\_Info.Amount\_Paid) AS 'Sum of Amount Paid'

FROM Claimant\_Info

FULL OUTER JOIN Claim\_Info ON Claimant\_Info.Claimant\_ID = Claim\_Info.Claimant\_ID

WHERE County NOT IN ('Cochise', 'Steuben')

GROUP BY County

ORDER BY County desc;

**\*Other exercises could include “case when” and “date part” functions, which is why I am using a fake date of birth.**