30 Days SQL Micro Course Answer PDF

1. **Total Number of Patients**

Write an SQL query to find the total number of patients across all hospitals.

**Answer:**

SELECT SUM (PATIENTS\_COUNT) AS TOTAL\_PATIENTS

FROM HOSPITAL\_DATA;

1. **Average Number of Doctors per Hospital**

Retrieve the average count of doctors available in each hospital.

**Answer:**

SELECT HOSPITAL\_NAME, AVG (DOCTORS\_COUNT) AS AVERAGE\_DOCTORS

FROM HOSPITAL\_DATA

GROUP BY HOSPITAL\_NAME;

1. **Top 3 Departments with the Highest Number of Patients**

Find the top 3 hospital departments that have the highest number of patients.

**Answer:**

SELECT HOSPITAL\_NAME, DEPARTMENT, PATIENTS\_COUNT

FROM HOSPITAL\_DATA

ORDER BY PATIENTS\_COUNT DESC limit 3;

1. **Hospital with the Maximum Medical Expenses**

Identify the hospital that recorded the highest medical expenses.

**Answer:**

SELECT HOSPITAL\_NAME, MEDICAL\_EXPENSES

FROM HOSPITAL\_DATA

ORDER BY MEDICAL\_EXPENSES DESC LIMIT 1;

1. **Daily Average Medical Expenses**

Calculate the average medical expenses per day for each hospital.

**Answer:**

SELECT HOSPITAL\_NAME,

AVG (MEDICAL\_EXPENSES/(Discharge\_Date::DATEAdmission\_Date::DATE)+1)As avg\_medical\_expenses\_per\_day

FROM HOSPITAL\_DATA

GROUP BY HOSPITAL\_NAME;

1. **Longest Hospital Stay**

Find the patient with the longest stay by calculating the difference between Discharge Date and Admission Date.

**Answer:**

SELECT Hospital\_name, PATIENTS\_COUNT, Admission \_Date, Discharge\_Date,

(Discharge\_Date::DATE – Admission\_Date::DATE) AS Length\_of\_Stay

FROM hospital\_data

ORDER BY Length\_of\_Stay DESC LIMIT 1;

1. **Total Patients Treated Per City**

Count the total number of patients treated in each city.

**Answer:**

SELECT

LOCATION AS CITY, SUM (PATIENTS\_COUNT) AS TOTAL\_PATIENTS\_TREATED

FROM HOSPITAL\_DATA

GROUP BY CITY

ORDER BY TOTAL\_PATIENTS\_TREATED DESC;

1. **Average Length of Stay Per Department**

Calculate the average number of days patients spend in each department.

**Answer:**

SELECT DEPARTMENT,

AVG (patients\_Count/ (DISCHARGE\_DATE::DATE - ADMISSION\_DATE::DATE)) AS AVG\_LENGTH\_OF\_STAY

FROM HOSPITAL\_DATA

GROUP BY DEPARTMENT

ORDER BY AVG\_LENGTH\_OF\_STAY DESC;

1. **Identify the Department with the Lowest Number of Patients**

Find the department with the least number of patients.

**Answer:**

SELECT DEPARTMENT, SUM (PATIENTS\_COUNT) AS TOTAL\_PATIENTS

FROM HOSPITAL\_DATA

GROUP BY DEPARTMENT

ORDER BY TOTAL\_PATIENTS ASC LIMIT 1;

1. **Monthly Medical Expenses Report**

Group the data by month and calculate the total medical expenses for each month.

**Answer:**

SELECT TO\_CHAR (ADMISSION\_DATE::DATE, 'YYYY-MM') AS MONTH,

SUM (MEDICAL\_EXPENSES) AS MONTHLY\_MEDICAL\_EXPENSES

FROM HOSPITAL\_DATA

GROUP BY MONTH

ORDER BY MONTH DESC;