**Assignment 07**

***Place your query right after each question***

The city’s Crimes Analysis unit has submitted the following data requests. Provide the SQL statements to satisfy these requests. Test the statements and show the query results.

1. Show the average number of crimes reported by an officer.

USE CityJailSummerDB

SELECT AVG(total\_num\_crimes) AS avg\_num\_crimes

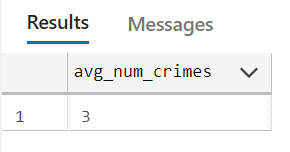
FROM (SELECT COUNT(\*) AS total\_num\_crimes

FROM crimes c

JOIN crime\_officers co

ON c.crime\_id = co.crime\_id

GROUP BY co.officer\_id) AS avg\_crime;



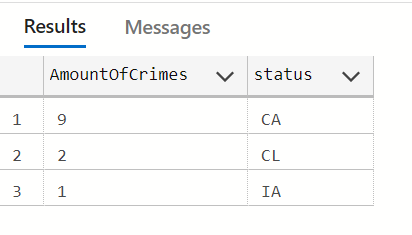
1. Show the total number of crimes by status.

USE CityJailSummerDB

SELECT COUNT([status]) AS AmountOfCrimes, [status]

FROM crimes

GROUP BY [status]



1. List the highest number of crimes committed by a person.

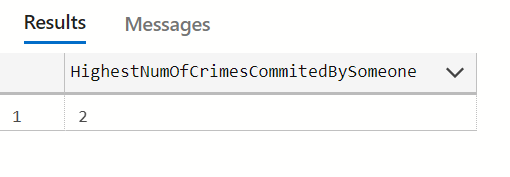
USE CityJailSummerDB

SELECT MAX(CrimesCommited) AS HighestNumOfCrimesCommitedBySomeone

FROM (SELECT criminal\_id, COUNT(\*) AS CrimesCommited

FROM crimes

GROUP By criminal\_id) AS MAX;

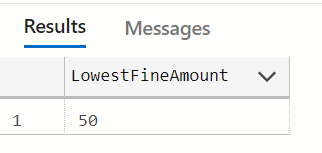


1. Display the lowest fine amount assigned to a crime charge.

USE CityJailSummerDB

SELECT MIN(fine\_amount) AS LowestFineAmount

FROM crime\_charges



1. List criminals (ID and name) who have multiple sentences assigned.

USE CityJailSummerDB

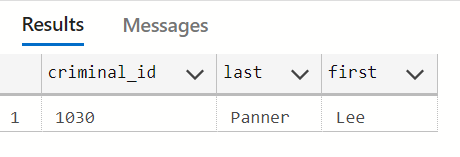
SELECT criminals.criminal\_id, [last], [first]

FROM criminals

JOIN sentences ON criminals.criminal\_id = sentences.criminal\_id

GROUP BY criminals.criminal\_id, [last], [first]

HAVING COUNT(\*) > 1



1. List the total number of crime charges successfully defended (guilty status assigned) by precinct. Include only precincts with at least seven guilty charges.

USE CityJailSummerDB

SELECT o.precinct, COUNT(\*) AS TotalDefendedCharges

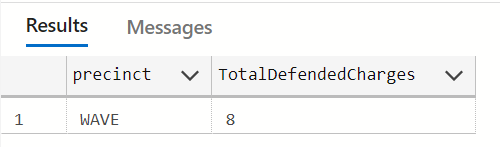
FROM crime\_officers co JOIN officers o ON o.officer\_id = co.officer\_id

JOIN crime\_charges cc ON cc.crime\_id = co.crime\_id

WHERE charge\_status = 'GL'

GROUP BY precinct

HAVING COUNT(\*) > 7



1. List the total amount of collections (fines and fees) and the total amount owed by crime classification.

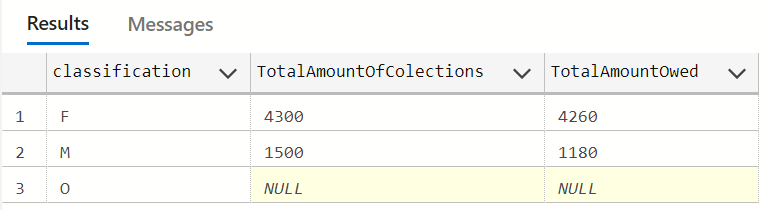
USE CityJailSummerDB

SELECT  c.classification, (SUM(cc.fine\_amount) + SUM(cc.court\_fee)) AS TotalAmountOfColections,

(SUM(cc.fine\_amount) + SUM(cc.court\_fee) - SUM(amount\_paid)) AS TotalAmountOwed

FROM crime\_charges cc JOIN crimes c ON cc.crime\_id = c.crime\_id

GROUP BY classification



1. List the total number of charges by crime classification and charge status. Include a grand total in the results.

USE CityJailSummerDB

SELECT c.classification,cc.charge\_status, COUNT(classification) AS total\_num\_charges\_by\_class\_and\_status

FROM crime\_charges cc

JOIN crimes c

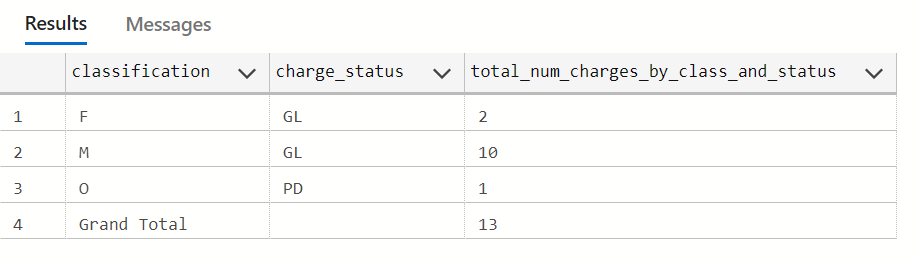
ON c.crime\_id = cc.crime\_id

GROUP BY classification, charge\_status

UNION ALL

SELECT 'Grand Total' charge\_status, ' ' charge\_status, COUNT(\*)

FROM crime\_charges



1. Perform the same task as in Question #8 and add a subtotal for each charge status.

USE CityJailSummerDB

SELECT c.classification,cc.charge\_status, COUNT(classification) AS total\_num\_charges\_by\_class\_and\_status

FROM crime\_charges cc

JOIN crimes c

ON c.crime\_id = cc.crime\_id

GROUP BY classification, charge\_status

UNION ALL

SELECT 'Guilty Charge Status Total' classification, ' ' charge\_status, COUNT(charge\_status)

FROM crime\_charges

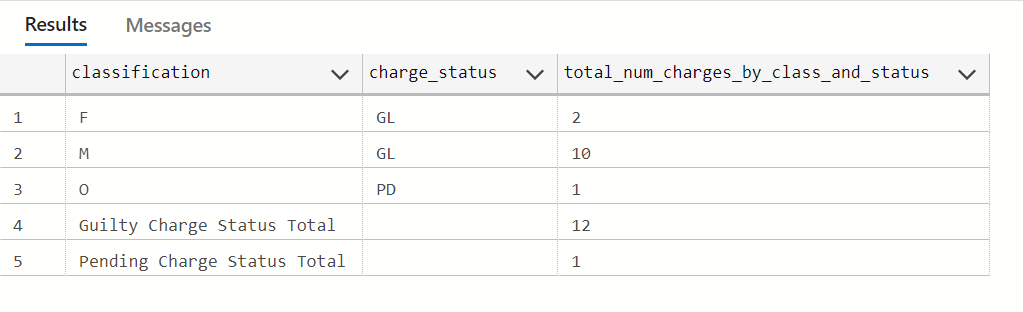
WHERE charge\_status = 'GL'

UNION ALL

SELECT 'Pending Charge Status Total' classification, ' ' charge\_status, COUNT(charge\_status)

FROM crime\_charges

WHERE charge\_status = 'PD';



1. Perform the same task as in Question #8 and add a subtotal by each crime classification.

USE CityJailSummerDB

SELECT c.classification,cc.charge\_status, COUNT(classification) AS total\_num\_charges\_by\_class\_and\_status

FROM crime\_charges cc

JOIN crimes c

ON c.crime\_id = cc.crime\_id

GROUP BY classification, charge\_status

UNION ALL

SELECT 'Felony Classification Total' classification, ' ' charge\_status, COUNT(classification)

FROM crimes

WHERE classification = 'F'

UNION ALL

SELECT 'Misdemeanor Classification Total' classification, ' ' charge\_status, COUNT(classification)

FROM crimes

WHERE classification = 'M'

UNION ALL

SELECT 'Other Classification Total' classification, ' ' charge\_status, COUNT(classification)

FROM crimes

WHERE classification = 'O';

