1. Display the lowest last name alphabetically (Customers table).

SELECT MAX(LAST\_NAME)

FROM CUSTOMERS

ORDER BY LAST\_NAME ASC;

1. Display the average monthly payment (Packages table).

SELECT AVG(MONTHLY\_PAYMENT)

FROM packages;

1. Display the highest last name alphabetically (Customers table).

SELECT MIN(LAST\_NAME)

FROM CUSTOMERS

ORDER BY LAST\_NAME ASC;

1. Display the number of internet packages (Packages table).

SELECT COUNT(PACK\_ID) AS NO\_OF\_PACKAGES

FROM packages;

1. Display the number of records in Customers table.

SELECT COUNT(CUSTOMER\_ID) AS NUMBER\_OF\_RECORDS

FROM CUSTOMERS;

1. Display the number of distinct states (Customers table).

SELECT COUNT(DISTINCT(STATE)) AS DISTINCT\_STATE

FROM customers;

1. Display the number of distinct internet speeds (Packages table).

SELECT COUNT(DISTINCT(SPEED)) AS DISTINCT\_STATE

FROM packages;

1. Display the number of values (exclude Nulls) in Fax column (Customers table).

SELECT COUNT(DISTINCT(FAX)) AS FAX

FROM customers

WHERE FAX IS NOT NULL;

1. Display the number of Null values in Fax column (Customers table).

SELECT COUNT(FAX) AS FAX

FROM customers

WHERE FAX IS NULL;

1. Display the highest, lowest and average monthly discount (Customers table).

SELECT MAX(MONTHLY\_DISCOUNT),MIN(MONTHLY\_DISCOUNT),AVG(MONTHLY\_DISCOUNT)

FROM CUSTOMERS;

1. Display the state and the number of customers for each state (Customers table).

SELECT STATE,COUNT(CUSTOMER\_ID) AS NO\_OF\_CUSTOMERS

FROM customers

GROUP BY STATE;

1. Display the internet speed and the average monthly payment for each speed (Packages table).

SELECT SPEED, AVG(MONTHLY\_PAYMENT)

FROM PACKAGES

GROUP BY SPEED;

1. Display the state and the number of distinct cities for each state (Customers table).

SELECT COUNT(DISTINCT(CITY)), STATE

FROM CUSTOMERS

GROUP BY STATE;

1. Display the sector number and the highest monthly payment for each sector (Packages table).

SELECT SECTOR\_ID, MAX(MONTHLY\_PAYMENT)

FROM PACKAGES

GROUP BY SECTOR\_ID;

1. Package number and average monthly discount (Customers table) –
   1. Display the package number and the average monthly discount for each package.
   2. Display the package number and the average monthly discount for each package, only for packages whose number equals 22 or 13.

A-> SELECT PACK\_ID, AVG(MONTHLY\_DISCOUNT)

FROM CUSTOMERS

GROUP BY PACK\_ID;

B->SELECT PACK\_ID, AVG(MONTHLY\_DISCOUNT)

FROM CUSTOMERS

WHERE PACK\_ID=22

OR PACK\_ID=13

GROUP BY PACK\_ID;

1. Display the highest, lowest and average monthly payment for each internet speed (Packages table).

SELECT MAX(MONTHLY\_PAYMENT),MIN(MONTHLY\_PAYMENT),AVG(MONTHLY\_PAYMENT)

FROM PACKAGES

GROUP BY SPEED;

1. The number of customer in each internet package (Customers table) –
   1. Display the package number and the number of customers for each package number.
   2. Modify the query to display the package number and number of customers for each package number, only for the customers whose monthly discount is greater than 20.
   3. Modify the query to display the package number and number of customers for each package number, only for the packages with more than 100 customers.

SELECT PACK\_ID, COUNT(CUSTOMER\_ID)

FROM CUSTOMERS

GROUP BY PACK\_ID;

SELECT PACK\_ID, COUNT(CUSTOMER\_ID)

FROM CUSTOMERS

WHERE MONTHLY\_DISCOUNT>20

GROUP BY PACK\_ID;

SELECT PACK\_ID, COUNT(CUSTOMER\_ID)

FROM CUSTOMERS

GROUP BY PACK\_ID

HAVING COUNT(CUSTOMER\_ID)>100;

1. Display the state, city and number of customers for each state and city.

SELECT STATE,CITY,COUNT(CUSTOMER\_ID) AS NUM\_OF\_CUST

FROM CUSTOMERS

GROUP BY STATE,CITY;

1. Cities and the average monthly discount (Customers table) –
   1. Display the city and the average monthly discount for each city
   2. Display the city and the average monthly discount for each city, only for the customers whose monthly discount is greater than 20

SELECT CITY,AVG(MONTHLY\_DISCOUNT) AS AVERAGE\_DISCOUNT

FROM CUSTOMERS

GROUP BY CITY;

SELECT CITY,AVG(MONTHLY\_DISCOUNT) AS AVERAGE\_DISCOUNT

FROM CUSTOMERS

GROUP BY CITY

HAVING AVG(MONTHLY\_DISCOUNT)>20;

1. States and the lowest monthly discount (Customers table) –
   1. Display the state and the lowest monthly discount for each state.
   2. Display the state and lowest monthly discount for each state, only for states where the lowest monthly discount is greater than 10

SELECT STATE,MIN(MONTHLY\_DISCOUNT) AS MIN\_DISCOUNT

FROM CUSTOMERS

GROUP BY STATE;

SELECT STATE,MIN(MONTHLY\_DISCOUNT) AS MIN\_DISCOUNT

FROM CUSTOMERS

GROUP BY STATE

HAVING MIN(MONTHLY\_DISCOUNT)>10;

1. Display the internet speed and number of package for each internet speed, only for the internet speeds with more than 8 packages.

SELECT SPEED, COUNT(PACK\_ID)

FROM PACKAGES

GROUP BY SPEED

HAVING COUNT(PACK\_ID)>8;