NYC 311 Customer Service Analysis

SELECT

  \*

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

ORDER BY

  Unique\_Key ASC

SELECT

  Complaint\_Type,

  COUNT(Location\_Type) AS Count\_of\_Location\_Type

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

GROUP BY

  Complaint\_Type

ORDER BY

  Count\_of\_Location\_Type ASC

SELECT

  Descriptor,

  COUNT(Location\_Type) AS Count\_of\_Location\_Type

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

GROUP BY

  Descriptor

ORDER BY

  Count\_of\_Location\_Type

SELECT

  Complaint\_Type,

  AVG(

    CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(0)] AS INT64) \* 3600 +

    CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(1)] AS INT64) \* 60 +

    CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(2)] AS INT64)

  ) AS Average\_Request\_Closing\_Time

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

GROUP BY

  Complaint\_Type

ORDER BY

  Average\_Request\_Closing\_Time

SELECT

  Descriptor,

  AVG(

    CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(0)] AS INT64) \* 3600 +

    CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(1)] AS INT64) \* 60 +

    CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(2)] AS INT64)

  ) AS Average\_Request\_Closing\_Time

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

GROUP BY

  Descriptor

ORDER BY

  Average\_Request\_Closing\_Time

WITH CountQuery AS (

  SELECT

    Complaint\_Type,

    COUNT(Location\_Type) AS Count\_of\_Location\_Type

  FROM

    `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

  GROUP BY

    Complaint\_Type

),

AverageQuery AS (

  SELECT

    Complaint\_Type,

    AVG(

      CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(0)] AS INT64) \* 3600 +

      CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(1)] AS INT64) \* 60 +

      CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(2)] AS INT64)

    ) AS Average\_Request\_Closing\_Time

  FROM

    `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

  GROUP BY

    Complaint\_Type

)

SELECT

  Complaint\_Type,

  Count\_of\_Location\_Type,

  Average\_Request\_Closing\_Time

FROM

  CountQuery

JOIN

  AverageQuery USING (Complaint\_Type)

ORDER BY

  Count\_of\_Location\_Type, Average\_Request\_Closing\_Time

WITH CountQuery AS (

  SELECT

    Descriptor,

    COUNT(Location\_Type) AS Count\_of\_Location\_Type

  FROM

    `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

  GROUP BY

    Descriptor

),

AverageQuery AS (

  SELECT

    Descriptor,

    AVG(

      CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(0)] AS INT64) \* 3600 +

      CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(1)] AS INT64) \* 60 +

      CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(2)] AS INT64)

    ) AS Average\_Request\_Closing\_Time

  FROM

    `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

  GROUP BY

    Descriptor

)

SELECT

  Descriptor,

  Count\_of\_Location\_Type,

  Average\_Request\_Closing\_Time

FROM

  CountQuery

JOIN

  AverageQuery USING (Descriptor)

ORDER BY

  Count\_of\_Location\_Type, Average\_Request\_Closing\_Time

SELECT

  Address\_Type,

  COUNT(Location\_Type) AS Count\_of\_Location\_Type

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

GROUP BY

  Address\_Type

ORDER BY

  Count\_of\_Location\_Type

SELECT

  City,

  COUNT(Complaint\_Type) AS Count\_of\_Complaint\_Type

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

GROUP BY

  City

ORDER BY

  Count\_of\_Complaint\_Type

SELECT

  City,

  COUNT(Descriptor) AS Count\_of\_Descriptor

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

GROUP BY

  City

ORDER BY

  Count\_of\_Descriptor

SELECT

  Community\_Board,

  COUNT(Complaint\_Type) AS Count\_of\_Complaint\_Type

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

GROUP BY

  Community\_Board

ORDER BY

  Count\_of\_Complaint\_Type

SELECT

  Community\_Board,

  COUNT(Descriptor) AS Count\_of\_Descriptor

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

GROUP BY

  Community\_Board

ORDER BY

  Count\_of\_Descriptor

SELECT

  Location\_Type,

  AVG(

      CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(0)] AS INT64) \* 3600 +

      CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(1)] AS INT64) \* 60 +

      CAST(SPLIT(Request\_Closing\_Time, ':')[OFFSET(2)] AS INT64)

    ) AS AVG\_Closing\_time

FROM

  `newproject-377218.NYC311\_Customer\_Service.NYC311\_Customer\_Service`

GROUP BY

  Location\_Type

ORDER BY

  AVG\_Closing\_time