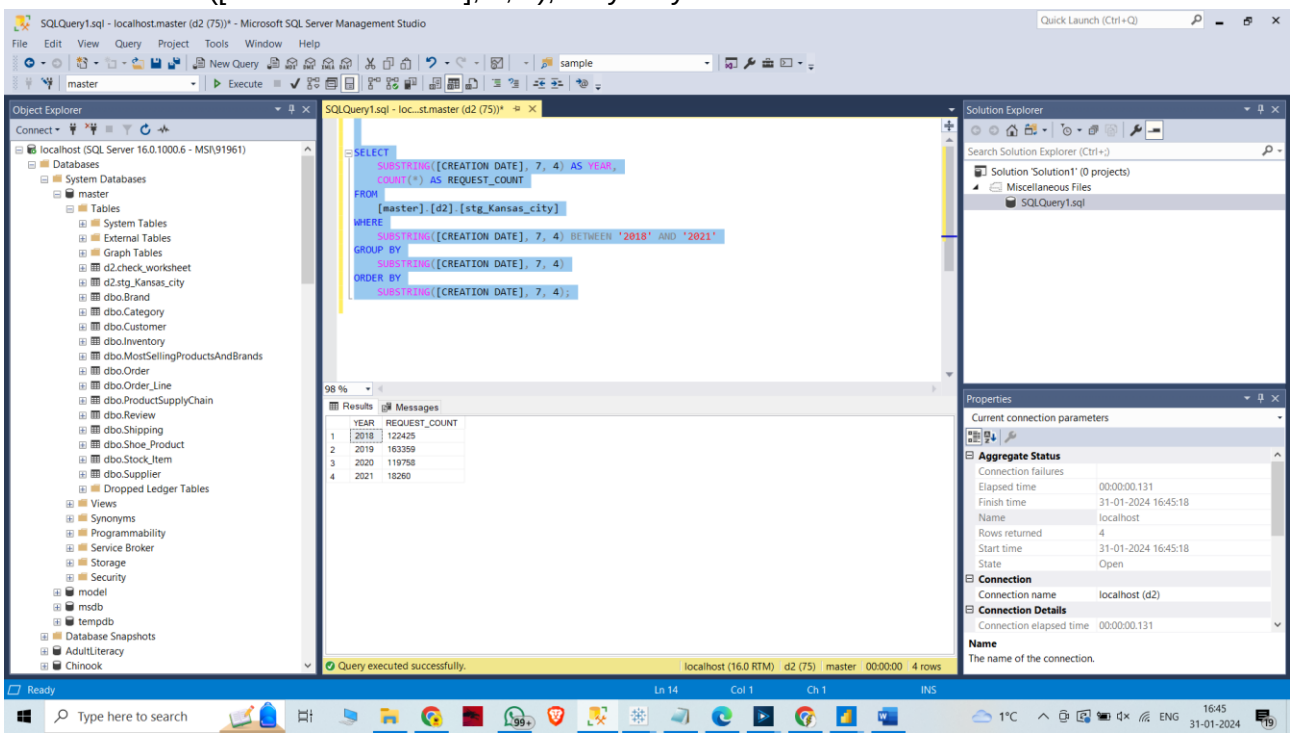
Q1.

For yearly Basis - over the years 2018-2021?

Query :

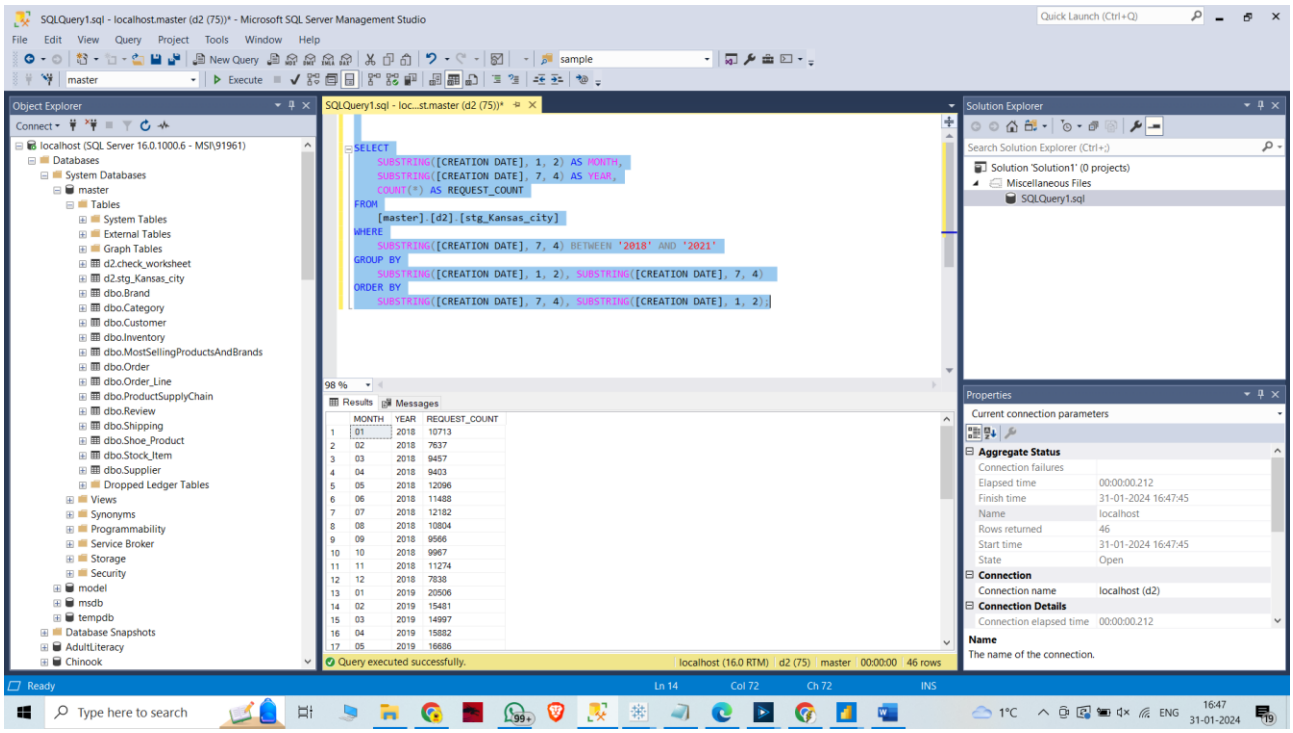
```
SELECT
    SUBSTRING([CREATION DATE], 7, 4) AS YEAR,
    COUNT(*) AS REQUEST_COUNT
FROM
    [master].[d2].[stg_Kansas_city]
WHERE
    SUBSTRING([CREATION DATE], 7, 4) BETWEEN '2018' AND '2021'
GROUP BY
    SUBSTRING([CREATION DATE], 7, 4)
ORDER BY
    SUBSTRING([CREATION DATE], 7, 4);For yearly basis from 2018-2021
```



For monthly basis from 2018-2021

Query:

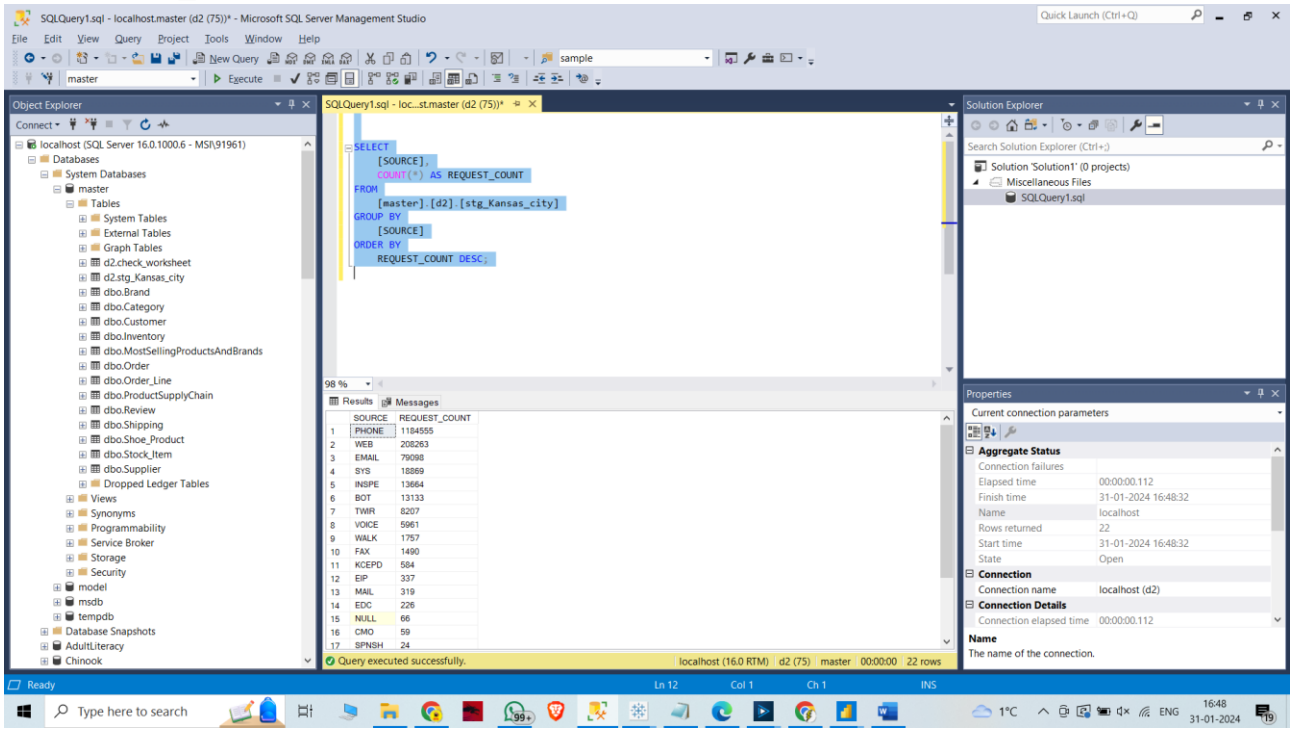
```
SELECT
    SUBSTRING([CREATION DATE], 1, 2) AS MONTH,
    SUBSTRING([CREATION DATE], 7, 4) AS YEAR,
    COUNT(*) AS REQUEST_COUNT
FROM
    damg7370_demo.stg_sfo_KansasCity_Assg1_prj
WHERE
    SUBSTRING([CREATION DATE], 7, 4) BETWEEN '2018' AND '2021'
GROUP BY
    SUBSTRING([CREATION DATE], 1, 2), SUBSTRING([CREATION DATE], 7, 4)
ORDER BY
    SUBSTRING([CREATION DATE], 7, 4), SUBSTRING([CREATION DATE], 1, 2);
```



Q2.

Query :

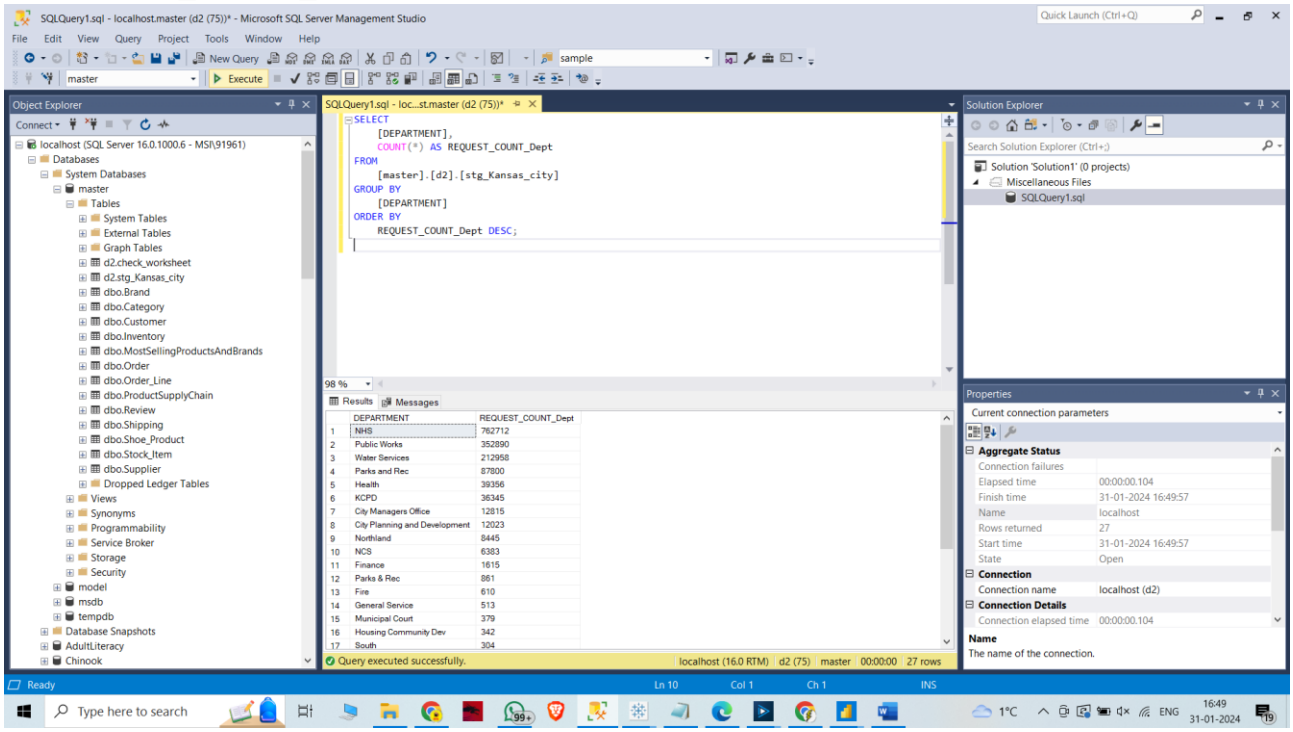
```
SELECT
   [SOURCE],
       COUNT(*) AS REQUEST_COUNT
FROM
   [master].[d2].[stg_Kansas_city]
GROUP BY
   [SOURCE]
ORDER BY
   REQUEST_COUNT DESC;
```



Q3.

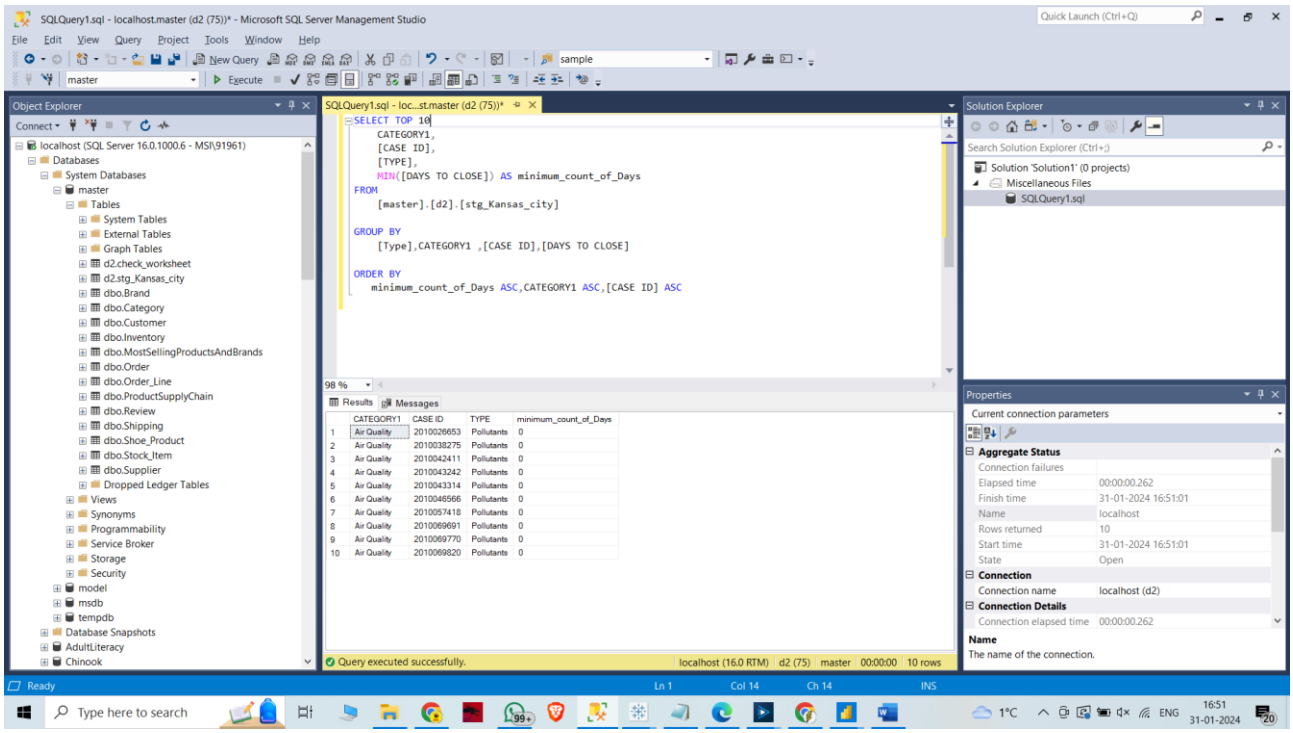
Query:

```
SELECT
   [DEPARTMENT],
       COUNT(*) AS REQUEST_COUNT_Dept
FROM
   [master].[d2].[stg_Kansas_city]
GROUP BY
   [DEPARTMENT]
ORDER BY
   REQUEST_COUNT_Dept DESC;
```



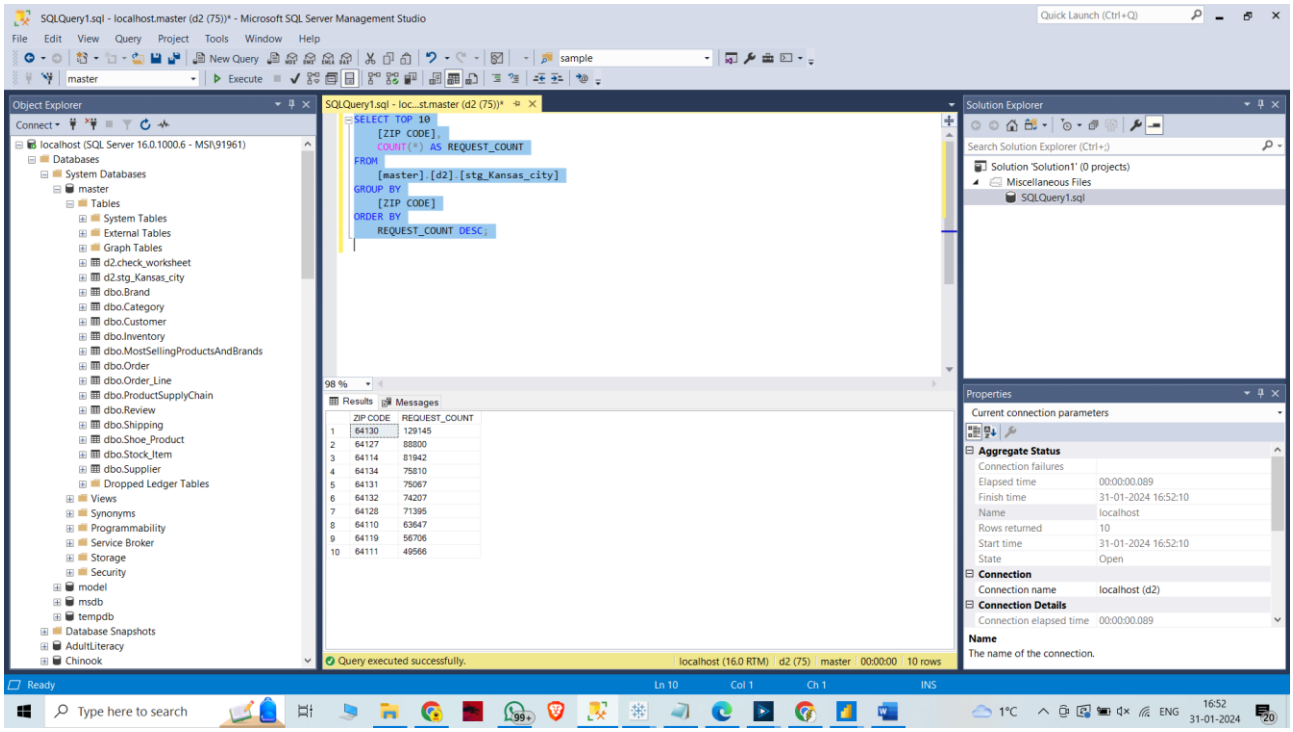
Q4.

```
SELECT TOP 10
        CATEGORY1,
    [CASE ID],
    [TYPE],
    MIN([DAYS TO CLOSE]) AS minimum_count_of_Days
FROM
    [master].[d2].[stg_Kansas_city]

GROUP BY
        [Type],CATEGORY1 ,[CASE ID],[DAYS TO CLOSE]

ORDER BY
   minimum_count_of_Days ASC,CATEGORY1 ASC,[CASE ID] ASC
```



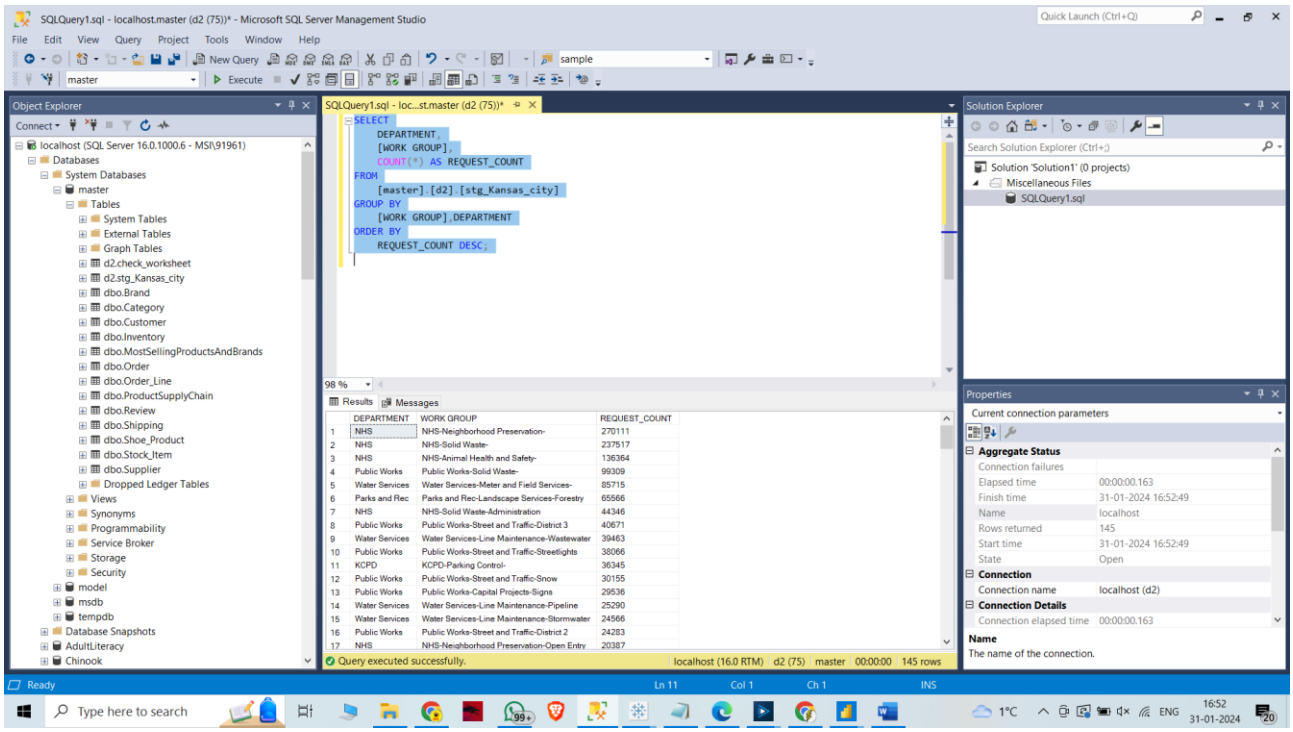
Q5.

```
SELECT TOP 10
    [ZIP CODE],
    COUNT(*) AS REQUEST_COUNT
FROM
    [master].[d2].[stg_Kansas_city]
GROUP BY
    [ZIP CODE]
ORDER BY
    REQUEST_COUNT DESC;
```



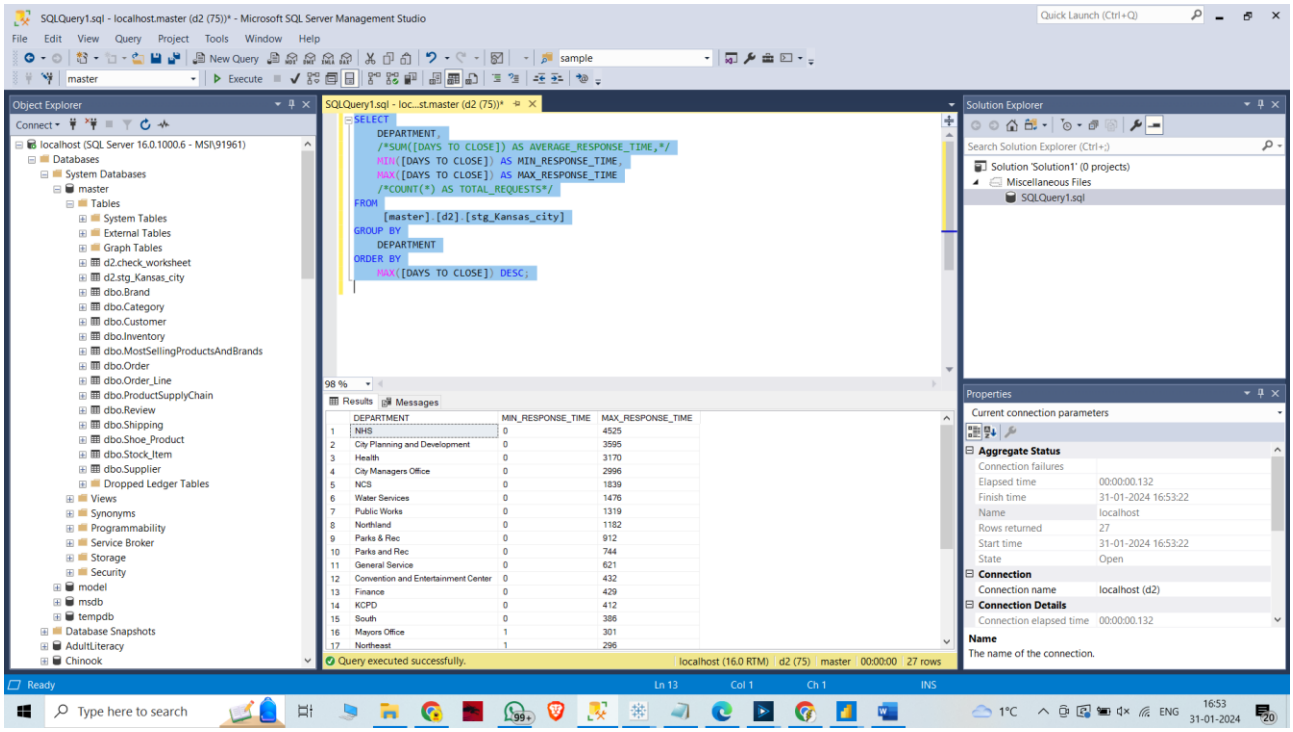
Q6.

```
SELECT
    DEPARTMENT,
    [WORK GROUP],
    COUNT(*) AS REQUEST_COUNT
FROM
    [master].[d2].[stg_Kansas_city]
GROUP BY
    [WORK GROUP],DEPARTMENT
ORDER BY
    REQUEST_COUNT DESC;
```



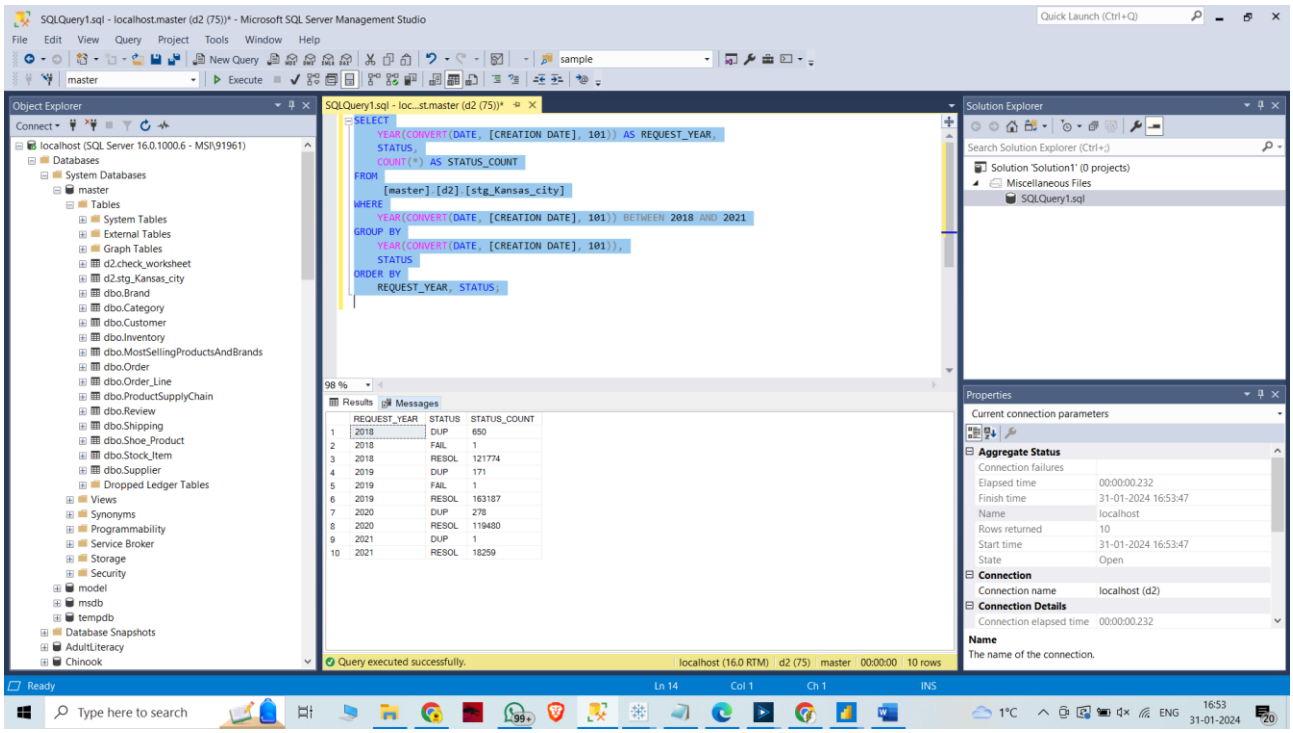
Q7.

```
SELECT
    DEPARTMENT,
    /*SUM([DAYS TO CLOSE]) AS AVERAGE_RESPONSE_TIME,*/
    MIN([DAYS TO CLOSE]) AS MIN_RESPONSE_TIME,
    MAX([DAYS TO CLOSE]) AS MAX_RESPONSE_TIME
    /*COUNT(*) AS TOTAL_REQUESTS*/
FROM
     [master].[d2].[stg_Kansas_city]
GROUP BY
    DEPARTMENT
ORDER BY
        MAX([DAYS TO CLOSE]) DESC;
```



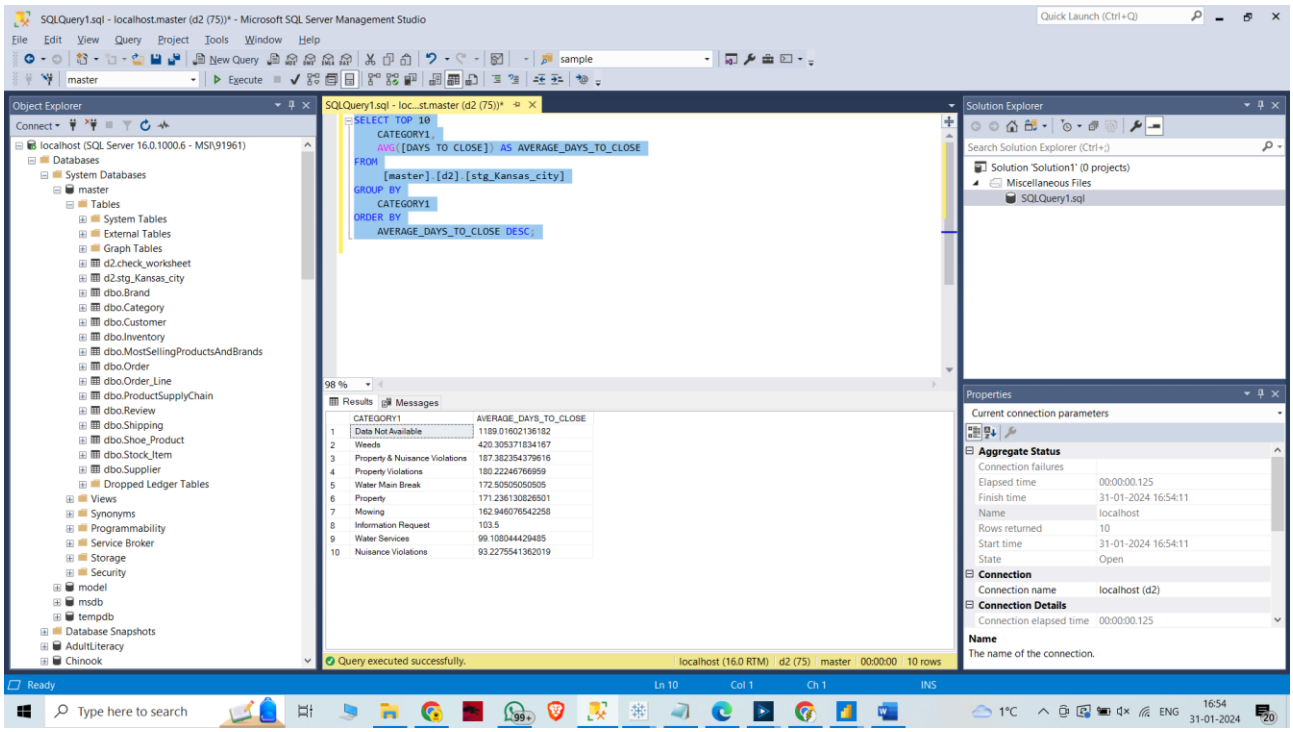
Q8.

```
SELECT
    YEAR(CONVERT(DATE, [CREATION DATE], 101)) AS REQUEST_YEAR,
    STATUS,
    COUNT(*) AS STATUS_COUNT
FROM
     [master].[d2].[stg_Kansas_city]
WHERE
    YEAR(CONVERT(DATE, [CREATION DATE], 101)) BETWEEN 2018 AND 2021
GROUP BY
    YEAR(CONVERT(DATE, [CREATION DATE], 101)),
    STATUS
ORDER BY
    REQUEST_YEAR, STATUS;
```



Q9.

```
SELECT TOP 10
    CATEGORY1,
    AVG([DAYS TO CLOSE]) AS AVERAGE_DAYS_TO_CLOSE
FROM
     [master].[d2].[stg_Kansas_city]
GROUP BY
    CATEGORY1
ORDER BY
        AVERAGE_DAYS_TO_CLOSE DESC;
```



Q10.

```
SELECT
   DEPARTMENT,
   COUNT(*) AS WORKLOAD,
   AVG([DAYS TO CLOSE]) AS AVERAGE_EFFICIENCY
FROM
    [master].[d2].[stg_Kansas_city]
GROUP BY
   DEPARTMENT
ORDER BY
   WORKLOAD DESC;
```