### Average Daily Screen Time for Children

Data Set: https://www.kaggle.com/datasets/ak0212/average-daily-screen-time-for-children

A dataset about children's daily Screen Time habits, categorized by age, gender

## Columns (6)

Attribute	Data Type	Description	
Age	Int	Represents the age of the children.	
Gender	Varchar(6)	Represents the gender of the children. (Male, Female, Other)	
Screen_Time_Type	Varchar(12)	Represents the type of screen time consumed. (Educational, Recreational, Total)	
DayType	char(7)	Whether the screen time was during the weekend or weekday.	
Average_Screen_Time	Numeric(4,2)	The average screen time in hours.	
Sample_Size	Int	Number of participants per age group	

#### RDBMS: MSSQL

- Download csv file
- Use MSSQL Import flat File wizard
- Map imports to DB as a new staging table "screen\_time"
- Check results of import using a select \*.
- Design table "ADST" to contain results from "screen\_time"
- Row outputs are expected, simplified "Other/Prefer not to say" to "Other", carried on with inserting results to the new table "ADST".

Created the Staging table "Screen\_time", containing all the rows from the csv downloaded from kaggle.

	AGE	(No column name)	SCREEN_TIME_TYPE	DAY_TYPE	AVERAGE_SCREEN_TIME_HOURS	SAMPLE_SIZE
1	5	Male	Educational	Weekday	0.439999997615814	500
2	5	Male	Recreational	Weekday	1.11000001430511	500
3	5	Male	Total	Weekday	1.54999995231628	500
4	5	Male	Educational	Weekend	0.5	500
5	5	Male	Recreational	Weekend	1.44000005722046	500
6	5	Male	Total	Weekend	1.92999994754791	500
7	5	Female	Educational	Weekday	0.490000009536743	500
8	5	Female	Recreational	Weekday	0.959999978542328	500
9	5	Female	Total	Weekday	1.45000004768372	500
10	5	Female	Educational	Weekend	0.5	500
11	5	Female	Recreational	Weekend	1.3999997615814	500
12	5	Female	Total	Weekend	1.89999997615814	500
13	5	Other	Educational	Weekday	0.519999980926514	500
14	5	Other	Recreational	Weekday	0.980000019073486	500
15	5	Other	Total	Weekday	1.5	500
16	5	Other	Educational	Weekend	0.439999997615814	500
17	5	Other	Recreational	Weekend	1.50999999046326	500
18	5	Other	Total	Weekend	1.95000004768372	500
19	6	Male	Educational	Weekday	0.639999985694885	480
20	6	Male	Recreational	Weekday	1.38999998569489	480
21	6	Male	Total	Weekday	2.01999998092651	480
22	6	Male	Educational	Weekend	0.740000009536743	480
23	6	Male	Recreational	Weekend	1.75	480
24	6	Male	Total	Weekend	2.49000000953674	480
25	6	Female	Educational	Weekday	0.569999992847443	480
26	6	Female	Recreational	Weekday	1.37000000476837	480
27	6	Female	Total	Weekday	1.95000004768372	480
28	6	Female	Educational	Weekend	0.829999983310699	480
29	6	Female	Recreational	Weekend	1.62999999523163	480
30	6	Female	Total	Weekend	2.46000003814697	480

Using an "insert into" statement, I was able to transfer the data from the staging table "Screen\_time" into the table "ADST" which I will perform queries on.

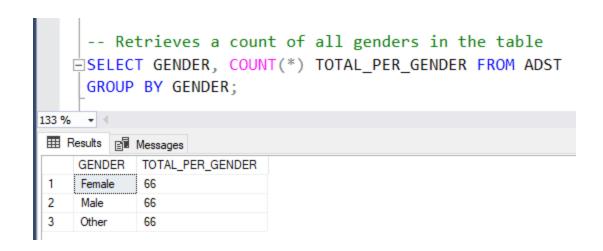
```
INSERT INTO ADST
SELECT AGE,
CASE
     WHEN GENDER = 'Other/Prefer not to say' THEN 'Other'
      ELSE GENDER
      END
, SCREEN_TIME_TYPE, DAY_TYPE, AVERAGE_SCREEN_TIME_HOURS, SAMPLE_SIZE FROM SCREEN_TIME;
           SELECT * FROM ADST;
    3 %
          + 4

    ■ Results

    Messages

         ID
               AGE GENDER
                                 SCREEN_TIME_TYPE
                                                        DAY_TYPE
                                                                     AVERAGE_SCREEN_TIME
                                                                                                SAMPLE_SIZE
    1
          1
                5
                       Male
                                  Educational
                                                         Weekday
                                                                     0.44
                                                                                                500
    2
          2
                5
                       Male
                                  Recreational
                                                         Weekday
                                                                     1.11
                                                                                                500
                                                                     1.55
    3
          3
                5
                       Male
                                  Total
                                                         Weekday
                                                                                                500
                5
                                  Educational
                                                                     0.50
                                                                                                500
    4
          4
                       Male
                                                         Weekend
    5
          5
                5
                       Male
                                  Recreational
                                                         Weekend
                                                                     1.44
                                                                                                500
    5
          6
                5
                                  Total
                                                         Weekend
                                                                     1.93
                       Male
                                                                                                500
          7
                5
                                  Educational
                                                         Weekday
                       Female
                                                                     0.49
                                                                                                500
    3
          8
                5
                       Female
                                  Recreational
                                                         Weekday
                                                                     0.96
                                                                                                500
    Э
          9
                5
                       Female
                                  Total
                                                         Weekday
                                                                     1.45
                                                                                                500
    10
          10
                5
                       Female
                                  Educational
                                                         Weekend
                                                                     0.50
                                                                                                500
                5
                                  Recreational
                                                         Weekend
                                                                     1.40
                                                                                                500
    11
          11
                       Female
                5
                                  Total
                                                         Weekend
                                                                     1.90
    12
          12
                       Female
                                                                                                500
                5
                       Other
                                                                     0.52
    13
          13
                                  Educational
                                                         Weekday
                                                                                                500
                5
                                                                     0.98
    14
                       Other
                                  Recreational
                                                         Weekday
                                                                                                500
          14
    15
          15
                5
                       Other
                                  Total
                                                         Weekday
                                                                     1.50
                                                                                                500
                5
                       Other
                                  Educational
                                                         Weekend
                                                                     0.44
                                                                                                500
    16
          16
    17
                5
                       Other
                                  Recreational
                                                         Weekend
                                                                                                500
          17
                                                                     1.51
    18
          18
                5
                       Other
                                  Total
                                                         Weekend
                                                                     1.95
                                                                                                500
                6
                                                                     0.64
                                                                                                480
    19
          19
                       Male
                                  Educational
                                                         Weekday
    20
                6
                       Male
                                  Recreational
                                                         Weekday
                                                                     1.39
                                                                                                480
          20
                                  Total
                                                                     2.02
                                                                                                480
    21
          21
                6
                       Male
                                                         Weekday
    22
                6
                                  Educational
                                                         Weekend
                                                                     0.74
                                                                                                480
          22
                       Male
                                  Recreational
                                                         Weekend
                                                                     1.75
    23
          23
                6
                       Male
                                                                                                480
                                  Total
                                                         Weekend
                                                                     2.49
                                                                                                480
    24
          24
                6
                       Male
    25
          25
                6
                       Female
                                  Educational
                                                         Weekday
                                                                     0.57
                                                                                                480
                       Female
                                  Recreational
                                                                     1.37
                                                                                                480
    26
          26
                6
                                                         Weekday
    27
          27
                6
                       Female
                                  Total
                                                         Weekday
                                                                     1.95
                                                                                                480
                                                                     0.83
    28
          28
                6
                       Female
                                  Educational
                                                         Weekend
                                                                                                480
                6
                                                                     1.63
                                                                                                480
    29
          29
                       Female
                                  Recreational
                                                         Weekend
    30
          30
                6
                       Female
                                  Total
                                                         Weekend
                                                                     2.46
                                                                                                480
```

# Queries



--Retrieves the MIN, MAX, AVERAGE, and Standard deviation for the average screen time per gender

SELECT GENDER,

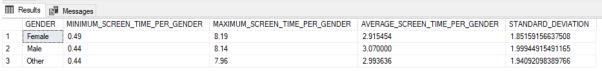
MIN(AVERAGE\_SCREEN\_TIME) MINIMUM\_SCREEN\_TIME\_PER\_GENDER,

MAX(AVERAGE\_SCREEN\_TIME) MAXIMUM\_SCREEN\_TIME\_PER\_GENDER,

AVG(AVERAGE\_SCREEN\_TIME) AVERAGE\_SCREEN\_TIME\_PER\_GENDER,

STDEV(AVERAGE\_SCREEN\_TIME) STANDARD\_DEVIATION FROM ADST

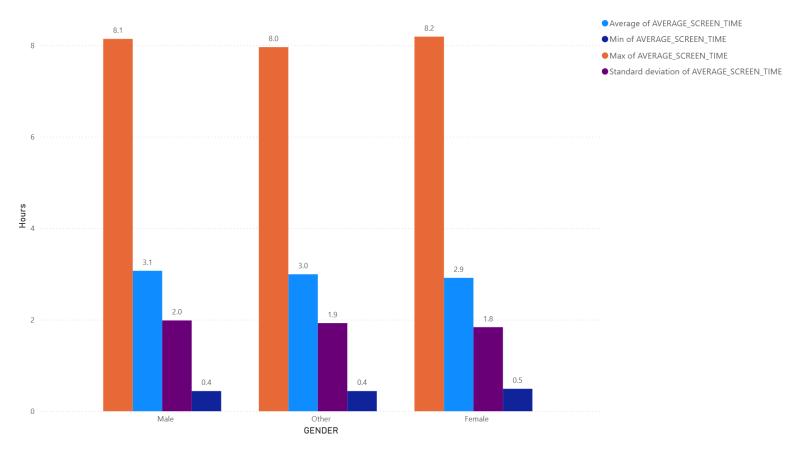
GROUP BY GENDER;



| - Retrieves all Trois where the screen time type is either Recreational or Educational and the day type is the Weekend, sorted by Gender, Age, then average screen time in descending order
| SELECT FINE INFE | TWEE | IN ('Recreational', 'Educational')
| ADD DAY\_TYPE - 'Neekend'
| Order by Gender, AGE, AVERAGE\_SCREEN\_TIME desc;
| STATE | The Rename of Members | STATE | STATE | The Rename of Members | STATE | The Rename of Members | STATE | STATE | The Rename of Members | STATE | STATE | The Rename of Members | STATE | STATE | STATE | The Rename of Members | STATE | ST

```
--Displays the running total of average screen time per gender
    SELECT AGE,
     GENDER,
      SUM(AVERAGE_SCREEN_TIME) OVER (PARTITION BY GENDER ORDER BY ID) RUNNING_TOTAL_AVERAGE_SCREEN_TIME_PER_GENDER,
      LEAD(AVERAGE_SCREEN_TIME) OVER (PARTITION BY GENDER ORDER BY ID) INCREASE
      FROM ADST;
133 % 🔻 🔻
 Results Messages
     AGE GENDER RUNNING_TOTAL_AVERAGE_SCREEN_TIME_PER_GENDER INCREASE
    5 Female
          Female
                  1.45
                                                             1.45
 3
     5
          Female
                  2.90
                                                             0.50
 4
     5
                  3.40
                                                             1.40
          Female
     5
          Female
                  4.80
                                                             1.90
 6
     5
          Female
                  6.70
                                                             0.57
     6
          Female
                  7.27
                                                             1.37
 8
          Female
                  8.64
                                                             1.95
          Female
                  10.59
                                                             0.83
 10
                  13.05
                                                             2.46
          Female
          Female
 13
          Female
                  16.32
                                                             1.61
 14
                  17.93
          Female
                                                             2.42
 15
                  20.35
          Female
                                                             0.66
 16
          Female
                  21.01
                                                             2.53
 17
          Female
                  23.54
                                                             3 19
 18
          Female
                  26.73
                                                             0.93
 19
     8
          Female
                  27.66
                                                             2.02
 20
     8
          Female
                  29.68
                                                             2.95
 21
     8
          Female
                  32.63
                                                             1.00
 22
          Female
                  33.63
                                                             2.61
 23
          Female
 24
          Female
                  39.86
                                                             1.12
 25
     9
          Female
                  40.98
                                                             2.26
 26
                  43.24
     9
          Female
                                                             3.39
 27
          Female
                  46.63
                                                             1.26
 28
     9
          Female
                  47.89
                                                             2.94
 29
     9
          Female
                  50.83
                                                             4 19
30 9
          Female
                  55.02
                                                             0.94
     --Displays the Average increase in screen time per gender
    WITH AVG_GENDER_INC AS(
     SELECT AGE,
     GENDER, SUM(AVERAGE_SCREEN_TIME) OVER (PARTITION BY GENDER ORDER BY ID) RUNNING_TOTAL_AVERAGE_SCREEN_TIME_PER_GENDER,
      LEAD(AVERAGE_SCREEN_TIME) OVER (PARTITION BY GENDER ORDER BY ID) INCREASE
      )SELECT GENDER, ROUND(AVG(INCREASE), 2) AVERAGE_INCREASE FROM AVG_GENDER_INC
      GROUP BY GENDER;
133 % 🕶 🔻
 Results Messages
    GENDER AVERAGE_INCREASE
    Female 2.950000
            3.110000
            3.030000
     Other
```

# Visualization



#### Average of AVERAGE\_SCREEN\_TIME by ID and GENDER

