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.

Results Messages

	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	1.39999997615814	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;
```

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

Queries

```sql
-- Retrieves a count of all genders in the table
SELECT GENDER, COUNT(*) TOTAL_PER_GENDER FROM ADST
GROUP BY GENDER;
```

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Results | Messages

	GENDER	TOTAL_PER_GENDER
1	Female	66
2	Male	66
3	Other	66

```sql
--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;
```

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Results | Messages

	GENDER	MINIMUM_SCREEN_TIME_PER_GENDER	MAXIMUM_SCREEN_TIME_PER_GENDER	AVERAGE_SCREEN_TIME_PER_GENDER	STANDARD_DEVIATION
1	Female	0.49	8.19	2.915454	1.85159156637508
2	Male	0.44	8.14	3.070000	1.99944915491165
3	Other	0.44	7.96	2.993636	1.94092098389766

```sql
-- Retrieves all rows 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 * FROM ADST
WHERE SCREEN_TIME_TYPE IN ('Recreational', 'Educational')
AND DAY_TYPE = 'Weekend'
order by Gender, AGE, AVERAGE_SCREEN_TIME desc;
```

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Results | Messages

	ID	AGE	GENDER	SCREEN_TIME_TYPE	DAY_TYPE	AVERAGE_SCREEN_TIME	SAMPLE_SIZE
1	11	5	Female	Recreational	Weekend	1.40	500
2	10	5	Female	Educational	Weekend	0.50	500
3	29	6	Female	Recreational	Weekend	1.63	480
4	28	6	Female	Educational	Weekend	0.83	480
5	47	7	Female	Recreational	Weekend	2.53	460
6	46	7	Female	Educational	Weekend	0.66	460
7	65	8	Female	Recreational	Weekend	2.61	440
8	64	8	Female	Educational	Weekend	1.00	440
9	83	9	Female	Recreational	Weekend	2.94	420
10	82	9	Female	Educational	Weekend	1.26	420
11	101	10	Female	Recreational	Weekend	3.63	400
12	100	10	Female	Educational	Weekend	1.09	400
13	119	11	Female	Recreational	Weekend	4.11	380
14	118	11	Female	Educational	Weekend	1.33	380
15	137	12	Female	Recreational	Weekend	3.81	360
16	136	12	Female	Educational	Weekend	2.01	360
17	155	13	Female	Recreational	Weekend	5.19	340
18	154	13	Female	Educational	Weekend	1.41	340
19	173	14	Female	Recreational	Weekend	5.15	320
20	172	14	Female	Educational	Weekend	2.10	320
21	191	15	Female	Recreational	Weekend	5.75	300
22	190	15	Female	Educational	Weekend	2.44	300
23	5	5	Male	Recreational	Weekend	1.44	500
24	4	5	Male	Educational	Weekend	0.50	500
25	23	6	Male	Recreational	Weekend	1.75	480
26	22	6	Male	Educational	Weekend	0.74	480
27	41	7	Male	Recreational	Weekend	2.14	460
28	40	7	Male	Educational	Weekend	1.08	460
29	59	8	Male	Recreational	Weekend	2.57	440
30	58	8	Male	Educational	Weekend	1.29	440

```sql
--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;
```

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Results | Messages

	AGE	GENDER	RUNNING_TOTAL_AVERAGE_SCREEN_TIME_PER_GENDER	INCREASE
1	5	Female	0.49	0.96
2	5	Female	1.45	1.45
3	5	Female	2.90	0.50
4	5	Female	3.40	1.40
5	5	Female	4.80	1.90
6	5	Female	6.70	0.57
7	6	Female	7.27	1.37
8	6	Female	8.64	1.95
9	6	Female	10.59	0.83
10	6	Female	11.42	1.63
11	6	Female	13.05	2.46
12	6	Female	15.51	0.81
13	7	Female	16.32	1.61
14	7	Female	17.93	2.42
15	7	Female	20.35	0.66
16	7	Female	21.01	2.53
17	7	Female	23.54	3.19
18	7	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	8	Female	33.63	2.61
23	8	Female	36.24	3.62
24	8	Female	39.86	1.12
25	9	Female	40.98	2.26
26	9	Female	43.24	3.39
27	9	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

```sql
--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
FROM ADST
)SELECT GENDER,ROUND(AVG(INCREASE),2) AVERAGE_INCREASE FROM AVG_GENDER_INC
GROUP BY GENDER;
```

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Results | Messages

	GENDER	AVERAGE_INCREASE
1	Female	2.950000
2	Male	3.110000
3	Other	3.030000

Visualization