PROBLEM STATEMENT

Write a SQL query to return the footer values from input table, meaning all the last non null values from each field as shown in expected output.

INPUT				
ID	CAR	LENGTH	WIDTH	HEIGHT
1	Hyundai Tucson	15	6	
2				20
3		12	8	15
4	Toyota Rav4		15	
5	Kia Sportage			18

EXPECTED OUTPUT			
CAR	LENGTH	WIDTH	HEIGHT
Kia Sportage	12	15	18

SOLUTION

```sql
With partition_cte as(
select *,
sum(case when car is not null then 1 else 0 end) over (order by id asc rows between unbounded preceding and current row) as car_partition,
sum(case when length is not null then 1 else 0 end) over (order by id asc rows between unbounded preceding and current row) as length_partition,
sum(case when width is not null then 1 else 0 end) over (order by id asc rows between unbounded preceding and current row) as width_partition,
sum(case when height is not null then 1 else 0 end) over (order by id asc rows between unbounded preceding and current row) as height_partition
from FOOTER
),
fetch_max_cte as(
select *,
MAX(car) over(PARTITION by car_partition) as last_car,
MAX(length) over(PARTITION by length_partition) as last_length,
MAX(width) over(PARTITION by width_partition) as last_width,
MAX(height) over(PARTITION by height_partition) as last_height
from partition_cte
)
select top 1 last_car as car, last_length as length, last_width as width, last_height as height
from fetch_max_cte
order by id desc
```

	car	length	width	height
1	Kia Sportage	12	15	18