Find the Loyal Customers using CTE, UNION ALL and GROUP BY

Problem:

- Find customers, total orders & app name used to order the food.
- Result should show only those customers who ordered food using only 1 app and not used multiple app.

Input Table:

Results Messages

	ID	ORDER_DATE	ZOMATO	SWIGY	FOODPANDA
1	1	2023-01-01	E101	E102	E103
2	2	2023-01-02	E104	E112	E115
3	3	2023-01-03	E106	E109	E110
4	4	2023-01-04	E105	E107	E104
5	5	2023-01-05	E111	E103	E109
6	6	2023-01-06	E101	E102	E113
7	7	2023-01-07	E110	E106	E108
8	8	2023-01-08	E105	E111	E115

Desired Output:

	CUTID	APP	TOTAL_ORDERS
1	E101	ZOMATO	2
2	E102	SWIGY	2
3	E105	ZOMATO	2
4	E107	SWIGY	1
5	E108	FOODPANDA	1
6	E112	SWIGY	1
7	E113	FOODPANDA	1
8	E115	FOODPANDA	2

Solution is given below:

Solution:

```
WITH CTE_C AS
(
 SELECT ZOMATO AS CUTID, 'ZOMATO' AS APP FROM DBO.PURCHASE
 UNION ALL
 SELECT SWIGY AS CUTID, 'SWIGY' AS APP FROM DBO.PURCHASE
 UNION ALL
 SELECT FOODPANDA AS CUTID, 'FOODPANDA' AS APP FROM DBO.PURCHASE
)
SELECT
 C.CUTID,
 MAX(C.APP) AS APP,
 COUNT(*) AS TOTAL_ORDERS
FROM CTE_C C
GROUP BY C.CUTID
HAVING COUNT(DISTINCT C.APP)=1
```

Results | Messages

	SALES_YEAR	DATE_MONTH	NEW_SAL
1	2021	January	2000
2	2021	February	1000
3	2021	March	3000
4	2021	April	1000
5	2021	May	2000
6	2021	June	1000
7	2021	July	5000

Table Creation script:

```
DROP TABLE IF EXISTS DBO.PURCHASE;
GO
CREATE TABLE DBO.PURCHASE
(
 ID TINYINT NOT NULL IDENTITY(1,1),
 ORDER_DATE DATE,
 ZOMATO VARCHAR(5),
 SWIGY VARCHAR(5),
 FOODPANDA VARCHAR(5)
);
```

```
GO
INSERT INTO DBO.PURCHASE VALUES
('2023-01-01', 'E101','E102','E103'),
('2023-01-02', 'E104','E112','E115'),
('2023-01-03', 'E106','E109','E110'),
('2023-01-04', 'E105','E107','E104'),
('2023-01-05', 'E111','E103','E109'),
('2023-01-06', 'E101','E102','E113'),
('2023-01-07', 'E110','E106','E108'),
('2023-01-08', 'E105','E111','E115');
GO
SELECT * FROM DBO.PURCHASE;
GO
```

Input Table:

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