

LEGENDS

Table DIST_SPEND → DISTINCT observations of xlsx tab SPENDERS

Table DIST_SESSION → DISTINCT observations of xlsx tab SESSION START

Table DIST_LEVEL → DISTINCT observations of xlsx tab LEVEL START

1. **Split the total purchase by device types and find out the percentage contribution of each device type and arrange your results from highest percentage to lowest percentage**

STEP 1

Create view table inner_join, consider TABLE DIST_SPEND & TABLE DIST_SESSION and perform the inner join operation on id & event_time

```
create view inner_join as select s.id,s.spent,d.device_name from dist_spend s INNER JOIN dist_session d ON (s.id = d.id AND s.event_time = d.event_time);
```

STEP 2

Create view table inner_join_group, perform group by and order by operation in table inner_join and create a new column for SUM of Spend/sales

```
create view inner_join_group as select device_name,sum(spent) as sum_sales from inner_join group by device_name order by sum_sales desc;
```

STEP 3

Perform the percentage calculation on column sum_sales to find spend by user based on device type

```
select device_name,sum_sales,round(sum_sales*100/(select SUM(sum_sales)as s from inner_join_group),2) AS 'Percentage_Sales' from inner_join_group;
```

OUTPUT

device_name	sum_sales	Percentage_Sales
iPadAir2	75212.32	91.23
iPhone6	1034.39	1.25
iPadAir	1027.58	1.25
iPhone5S	675.1	0.82
iPad4	517.36	0.63
iPhone6S+	467.68	0.57
iPhone6+	409.39	0.5
"iPad5	376.94	0.46
iPhone6S	354.74	0.43
iPhone5C	306.94	0.37
iPod5	299.97	0.36
"iPhone8	263.79	0.32
iPadMini3	225.9	0.27
iPhone5	186.64	0.23
iPhone4S	171.96	0.21
iPadMini4	165.96	0.2
iPadMini	161.96	0.2
iPad3	160.73	0.19
"iPod7	134.96	0.16

2. What is the sum of last 2 purchases by every user present in the "Spenders" tab?

STEP 1

Create a view table temp_table using partition by operation and row number and order by event_time in descending order

Create view temp_table as (select *, ROW_NUMBER() OVER (partition by id order by event_time DESC) as RowNumber from dist_spend;

STEP 2

Select the first 2 rows from temp_table and calculate the sum of spend and apply group by operation.

**SELECT id, sum(spent) as SumOfLastTwoPurchases from temp_table
where RowNumber in (1,2) group by id;**

OUTPUT EXTRACTED from first 10 observations

Id	SumOfLastTwoPurchases
011A3515-4A03-4350-9574-25346518A6A6	109.97999976
0325F505-2A21-44DA-8A2C-784E9192B241	14.979999954
0468B646-70AE-42B9-B0CB-57AA168A42CE	2.99000001
07F425F8-EF9C-46FD-8DF8-28682F27C197	5.579999924
0861668E-4028-4251-8AEB-B5B306A06041	6.989999771
0946982A-E0C2-4B02-9D82-26439E770FA5	7.989999771
0B2F217E-DC56-4368-8129-CB2FC09B0B7A	10.97999978
0BDD6197-AEFA-475A-B9BD-8337D8105EB9	2.980000019
0D7D3C91-B2AF-4DC8-8F3F-8951AA842EB6	15.979999954
0DF84703-2455-4B51-9254-B62E62E93CF8	2.99000001

3. What is the average spend by country?

STEP 1

Considered TABLE DIST_SPEND & TABLE DIST_SESSION and perform the inner join operation on columns ID & event time

```
create view q4_join as select s.id,s.spent,d.country from dist_spend s INNER JOIN dist_sess1 d ON (s.id = d.id AND s.event_time = d.event_time);
```

STEP 2

Perform group by and order by operation in view table q4_join and create a new column for AVG of Spend/sales

```
create view q4_group as select country, round(avg(spent),2) as average from q4_join group by country order by average desc;
```

OUTPUT

country	average
GB	947.18
AX	34.66
NZ	31.24
US	30.27
IN	29.44
FR	25.6
AU	16.02
IT	5.19
CA	3.87
AL	2.79

4. What percentage of users make a repeat purchase?

Considered TABLE DIST_SPEND which captures the information on number of times a customer purchased apps

STEP 1

Finding the total count of unique customer and saving in view table tot_counts

create view tot_counts as select id, count(spent) as count from dist_spend group by id order by count desc;

Total number of unique customers – 233

STEP 2

Creating a new table which depicts information on customer who have purchase app more than once.

create view counts as select id, count(spent) as count from dist_spend group by id having count > 1 order by count desc;

Total number of repeat purchasers – 149

PERCENTAGE OF REPEAT PURCHASERS – 64%