

POWER-BI SCENARIO BASED QUESTIONS

QUESTION 11 & 12

- Running 12 months Average Sales
- RANKX

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QUESTION 11 Running 12 months average

SAMPLE TABLES

product ▼	order date ▼	sales value ▼
A	02-07-2022	100
A	22-07-2022	150
B	10-06-2022	200
B	10-09-2021	600
B	10-06-2020	400
C	11-04-2022	550
D	12-03-2022	890
D	12-08-2021	150
E	10-10-2021	275

Sales2 table

Calendar table

```
1 Calendar_table =  
2 var a = CALENDAR(DATE(2020,01,01), DATE(YEAR(TODAY()),MONTH(TODAY()),DAY(TODAY())))  
3 RETURN  
4 GENERATE(a,  
5 var b = [DATE]  
6 var c = YEAR([DATE])  
7 var d = MONTH([DATE])  
8 var e = DAY([DATE])  
9 return  
10 ROW("Year",c,"Month no", d, "Day", e))]
```

```

1 Running 12months Average =
2 CALCULATE(AVERAGE(sales2[sales value]),
3 DATESINPERIOD(Calendar_table[Date],MAX(Calendar_table[Date]),-12,MONTH))

```

product	Sum of sales value	Running 12months Average
A	250	125.00
B	1200	400.00
C	550	550.00
D	1040	520.00
E	275	275.00
Total	3315	368.33

QUESTION 12 Check whether the given Ranking measure will display output

SAMPLE TABLE

Product ▾	Order date ▾	Sales value ▾	Region ▾	Country ▾
A	02 July 2022	100	Asia	India
A	22 July 2022	150	Asia	Srilanka
B	10 June 2022	200	Asia	Bangladesh
B	10 August 2021	600	Europe	Germany
B	10 June 2020	400	Europe	Frace
C	11 April 2022	550	North America	Mexico
D	12 March 2022	890	North America	Cuba
D	12 August 2021	150	Africa	South Africa
E	10 October 2021	275	Africa	Nigeria

Sales3 table

Check if this measure is correct, if not correct it...

```
1 Ranking = RANKX(Sales3,SUM(Sales3[Sales value]),,DESC,Dense)
```

Region	Sum of Sales value	Ranking
Africa	425	1
Asia	450	1
Europe	1000	1
North America	1440	1

Here, full table is access, you need to specify the region column to get filter with ALL() and 2nd expression sum of sales value doesn't work here, it needs to get in measure as a Total sales

```
1 Total Sales = SUM(Sales3[Sales value])
```

```
1 Corrected Ranking = RANKX(ALL(Sales3[Region]),[Total Sales],,DESC,Dense)
```

Region	Sum of Sales value	Ranking	Corrected Ranking
North America	1440	1	1
Europe	1000	1	2
Asia	450	1	3
Africa	425	1	4

Region	Sum of Sales value	Ranking	Corrected Ranking
Europe	1000	1	2
Asia	450	1	3
Africa	425	1	4

Region	
<input checked="" type="checkbox"/>	Africa
<input checked="" type="checkbox"/>	Asia
<input checked="" type="checkbox"/>	Europe
<input type="checkbox"/>	North America

Here, when we filter the random region same ranking is given rather than starting from 1 for selected regions.
To correct this, ALLSELECTED() function is used.

1 Corrected Ranking = RANKX(ALLSELECTED(Sales3[Region]),[Total Sales],,DESC,Dense)

Region	Sum of Sales value	Ranking	Corrected Ranking
Europe	1000	1	1
Asia	450	1	2
Africa	425	1	3

Region	
<input checked="" type="checkbox"/>	Africa
<input checked="" type="checkbox"/>	Asia
<input checked="" type="checkbox"/>	Europe
<input type="checkbox"/>	North America

Using ALLSELECTED() ranking starts from 1 itself.

DATESINPERIOD

Returns a table that contains a column of dates that begins with a specified start date and continues for the specified number and type of date intervals.

This function is suited to pass as a filter to the [CALCULATE](#) function. Use it to filter an expression by standard date intervals such as days, months, quarters, or years.

Syntax

DAX

```
DATESINPERIOD(<dates>, <start_date>, <number_of_intervals>, <interval>)
```

RANKX

Returns the ranking of a number in a list of numbers for each row in the *table* argument.

Syntax

DAX

```
RANKX(<table>, <expression>[, <value>[, <order>[, <ties>]]])
```

ALL

Returns all the rows in a table, or all the values in a column, ignoring any filters that might have been applied. This function is useful for clearing filters and creating calculations on all the rows in a table.

Syntax

DAX

```
ALL( [<table> | <column>[, <column>[, <column>[,...]]]] )
```

ALLSELECTED

Removes context filters from columns and rows in the current query, while retaining all other context filters or explicit filters.

The ALLSELECTED function gets the context that represents all rows and columns in the query, while keeping explicit filters and contexts other than row and column filters. This function can be used to obtain visual totals in queries.

Syntax

DAX

```
ALLSELECTED([<tableName> | <columnName>[, <columnName>[, <columnName>[,...]]]])
```

THANK YOU

- MAYURI .D.