

EXAMPLE #7

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

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StoreLocation	Product	Date	Revenue
Bellandur	Bananas	January 18,2016	8,236.33
Bellandur	Nutella	January 18,2016	7,455.67
Bellandur	Peanut Butter	January 18,2016	5,316.89
Bellandur	Milk	January 18,2016	2,433.76
Koramangala	Bananas	January 18,2016	9,456.01
Koramangala	Nutella	January 18,2016	3,644.33
Koramangala	Peanut Butter	January 18,2016	8,988.64
Koramangala	Milk	January 18,2016	1,621.58
Bellandur	Bananas	January 17,2016	2342.33
Bellandur	Nutella	January 17,2016	6345.10
Bellandur	Peanut Butter	January 17,2016	5673.01
Bellandur	Milk	January 17,2016	4543.98
Koramangala	Bananas	January 17,2016	8902.65
Koramangala	Nutella	January 17,2016	9114.67
Koramangala	Peanut Butter	January 17,2016	5102.05
Koramangala	Milk	January 17,2016	1299.45

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

StoreLocation	Product	Date	Revenue
Bellandur	Bananas	FIRST, LET'S MENTALLY SORT BY THE STORE LOCATION COLUMN	
Bellandur	Nutella		
Bellandur	Peanut Butter		
Bellandur	Milk		
Koramangala	Bananas		
Koramangala	Nutella		
Koramangala	Peanut Butter		
Koramangala	Milk		
Bellandur	Bananas		
Bellandur	Nutella		
Bellandur	Peanut Butter		
Bellandur	Milk		
Koramangala	Bananas		
Koramangala	Nutella		
Koramangala	Peanut Butter		January 17,2016 5102.05
Koramangala	Milk		January 17,2016 1299.45

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Bellandur	Bananas	FIRST, LET'S MENTALLY SORT BY THE STORE LOCATION COLUMN	
Bellandur	Nutella		
Bellandur	Peanut Butter		
Bellandur	Milk		
Bellandur	Bananas		
Bellandur	Nutella		
Bellandur	Peanut Butter		
Bellandur	Milk		
Koramangala	Bananas		
Koramangala	Nutella		
Koramangala	Peanut Butter		
Koramangala	Milk		
Koramangala	Bananas		
Koramangala	Nutella		
Koramangala	Peanut Butter		January 17,2016 5102.05
Koramangala	Milk		January 17,2016 1299.45

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

Store location	Product	Date	Revenue
Bellandur	Bananas	January 18,2016	8,236.33
DISTINCT VALUE = {BELLANDUR}	Bananas	HOW MANY DISTINCT OR UNIQUE VALUES ARE THERE?	
	Milk		
	Milk		
	Nutella		
	Nutella		
	Peanut Butter		
Bellandur	Peanut Butter		
Koramangala	Bananas		
DISTINCT VALUE = {KORAMANGALA}	Bananas		
	Milk		
	Milk		
	Nutella		
	Nutella		
Koramangala	Peanut Butter		
Koramangala	Peanut Butter	January 17,2016	5102.05

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

Store Location	Product
Bellandur	Bananas
	Bananas
	Milk
	Milk
	Nutella
	Nutella
Koramangala	Peanut Butter
	Peanut Butter
	Bananas
	Bananas
	Milk
	Milk
Koramangala	Nutella
	Nutella
Koramangala	Peanut Butter
	Peanut Butter

DISTINCT VALUE
= {BELLANDUR}

DISTINCT VALUE
= {KORAMANGALA}

FLATTEN THE TABLE
(ELIMINATE EXCESS
ROWS!)

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

FLATTEN THE TABLE
(ELIMINATE EXCESS
ROWS!)

Date	Revenue
ALL	ALL
ALL	ALL

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

THIN THE TABLE
(ELIMINATE EXCESS
COLUMNS!)

Date

Revenue

ALL

ALL

ALL

ALL

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

COUNT THESE!

eLocation

dur

ngala

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

NumUniqueStoreLocations

2

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

**WHICH
ROWS?**

ALL

**WHICH
COLUMNS?**

**COUNT DISTINCT
VALUES IN
STORE LOCATION**

**WHICH
TABLES?**

SALES_DATA

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

SELECT

**WHICH
COLUMNS?**

**COUNT DISTINCT
VALUES IN STORE
LOCATION**

FROM

**WHICH
TABLES?**

SALES_DATA

GROUP BY

**WHICH
ROWS?**

ALL

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

```
SELECT COUNT (DISTINCT StoreLocation)  
        UniqueStoreLocations
```

```
FROM    SALES_DATA ;
```


FIND THE NUMBER OF UNIQUE STORE LOCATIONS

NumUniqueStoreLocations

2

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

SELECT

**COUNT (DISTINCT StoreLocation)
NumUniqueStoreLocations**

FROM

SALES_DATA ;

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

SELECT

```
COUNT (DISTINCT StoreLocation)  
      NumUniqueStoreLocations
```

FROM

```
SALES_DATA ;
```

THIS LINE IS VERY INTERESTING,
LET'S BREAK IT DOWN!

COUNT(DISTINCT StoreLocation)
NumUniqueStoreLocations

THIS LINE IS VERY INTERESTING,
LET'S BREAK IT DOWN!

COUNT IS JUST LIKE SUM, AVG, MIN,
MAX - AN AGGREGATE FUNCTION

COUNT(DISTINCT StoreLocation)
NumUniqueStoreLocations

THIS LINE IS VERY INTERESTING,
LET'S BREAK IT DOWN!

COUNT IS JUST LIKE SUM, AVG, MIN,
MAX - AN AGGREGATE FUNCTION

THE COLUMN IT OPERATES ON
IS DISTINCT STORE LOCATION

COUNT(DISTINCT StoreLocation)
NumUniqueStoreLocations

THIS LINE IS VERY INTERESTING,
LET'S BREAK IT DOWN!

COUNT IS JUST LIKE SUM, AVG, MIN,
MAX - AN AGGREGATE FUNCTION THE COLUMN IT OPERATES ON
IS DISTINCT STORE LOCATION

DISTINCT ELIMINATES
DUPLICATES FROM A COLUMN

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

THIS FUNCTION RETURNS A SINGLE VALUE, CALLED
`NumUniqueStoreLocations`

`NumUniqueStoreLocations`

2

EXAMPLE #8

WHAT WOULD THIS QUERY RETURN?

WHAT WOULD THIS QUERY RETURN?

SELECT

COUNT(DISTINCT StoreLocation)
NumUniqueStoreLocations

FROM

SALES_DATA ;

ERR.. WE JUST SOLVED
THIS

WHAT WOULD THIS QUERY RETURN?

SELECT

COUNT(~~DISTINCT~~ StoreLocation)
NumUniqueStoreLocations

FROM

SALES_DATA ;

EXACTLY.. BUT NOT THIS

WHAT WOULD THIS QUERY RETURN?

```
SELECT      COUNT (StoreLocation)  
            NumStoreLocations  
  
FROM  
  
    SALES_DATA    ;
```

EXACTLY.. BUT NOT THIS

FIND THE NUMBER OF UNIQUE STORE LOCATIONS

THIS FUNCTION RETURNS A SINGLE VALUE, CALLED
`NumStoreLocations`

`NumStoreLocations`

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