

Data Summarization using Pivot Table

08 August 2024 21:14

Data Summarization using Pivot Table

Change Type with Locale

UK / India - dd/mm/yyyy

U.S.A - mm/dd/yyyy

→ Long Date Format / Short Date Format.

8th August 2024 , Timings.

Pivot Table :

Its a tool used for the summarization of the data.

- 10 K records of Information :
Youtube Content Analysis.

Summarize

Top 10 Channel / Content Creator / Category having a good views.

Safety Data Analysis Using Query Function and Pivot Tables

Safety Data Analysis Using Query Function and Pivot Tables

QUERY:

The `QUERY` function in Google Sheets is a powerful tool for filtering and manipulating data. It allows users to retrieve specific information from a dataset based on specified conditions. Understanding how to use the `QUERY` function is essential for efficient data analysis and reporting in Google Sheets.

Syntax:

The basic syntax of the `QUERY` function is as follows:

```
=QUERY(data, query, [headers])
```

- **data:** The range of cells containing the data you want to query.
- **query:** The query string defining the conditions and operations to be applied to the data.
- **headers (optional):** A boolean indicating whether the first row of data contains headers. Set to `TRUE` if there are headers, `FALSE` if not.

Show gender, injury, incident type where days lost is more than 3.

A	B	C	D
more than 3			
Gender	Injury Location	Incident Type	
Male	Neck	Crush & Pinch	
Male	Arms	Crush & Pinch	
Male	Arms	Fall	
Male	Head	Equipment	
Male	Hands	Fall	
Male	N/A	Burn	
Male	Back	Lifting	
Male	Abdomen	Slip/trip	
Male	Arms	Falling object	
Female	Eye	Vehicle	
Female	Head	Vehicle	
Male	Neck	Lifting	
Male	Neck	Slip/trip	
Male	Trunk	Cut	
Male	N/A	Equipment	
Male	N/A	Equipment	
A17	Trunk	Equipment	
<code>=QUERY(SafetyData!B:F,"SELECT C,B,E WHERE F>3")</code>			
Male	Multiple	Crush & Pinch	
Male	Head	Burn	

`=QUERY(SafetyData!B:F,"SELECT C,B,E WHERE F>3")`

→ Selecting Gender Column , then Injury Location , Incident Type , where clause [Applying a filter] on the basis of Day Lost > 3.

`=QUERY(inf,"SELECT C,B,E WHERE F>3")`

Info	SafetyData!A1:K515
------	--------------------

```
=QUERY(info, "SELECT C,B,E WHERE F>3")
```

SafetyData!A1:K515

Info

Tab to accept

fx =QUERY(Info,"SELECT I , J WHERE F>3 AND K > 2000")

E	F	G																														
y gender and age. dents by report type.																																
show shifts,department where days lost >3 and incident cost>2000																																
<table border="1"><thead><tr><th>Shift</th><th>Department</th></tr></thead><tbody><tr><td>Night</td><td>Shipping</td></tr><tr><td>Afternoon</td><td>Painting</td></tr><tr><td>Night</td><td>Purchasing</td></tr><tr><td>Day</td><td>Shipping</td></tr><tr><td>Afternoon</td><td>Painting</td></tr><tr><td>Day</td><td>Melting</td></tr><tr><td>Day</td><td>Administration</td></tr><tr><td>Night</td><td>Melting</td></tr><tr><td>Night</td><td>Security</td></tr><tr><td>Day</td><td>Shipping</td></tr><tr><td>Night</td><td>Fabrication</td></tr><tr><td>Night</td><td>Finishing</td></tr><tr><td>Afternoon</td><td>Painting</td></tr><tr><td>Night</td><td>Painting</td></tr></tbody></table>			Shift	Department	Night	Shipping	Afternoon	Painting	Night	Purchasing	Day	Shipping	Afternoon	Painting	Day	Melting	Day	Administration	Night	Melting	Night	Security	Day	Shipping	Night	Fabrication	Night	Finishing	Afternoon	Painting	Night	Painting
Shift	Department																															
Night	Shipping																															
Afternoon	Painting																															
Night	Purchasing																															
Day	Shipping																															
Afternoon	Painting																															
Day	Melting																															
Day	Administration																															
Night	Melting																															
Night	Security																															
Day	Shipping																															
Night	Fabrication																															
Night	Finishing																															
Afternoon	Painting																															
Night	Painting																															

=QUERY(Info, "SELECT I , J WHERE F>3 AND K > 2000")

Info

fx 4.5

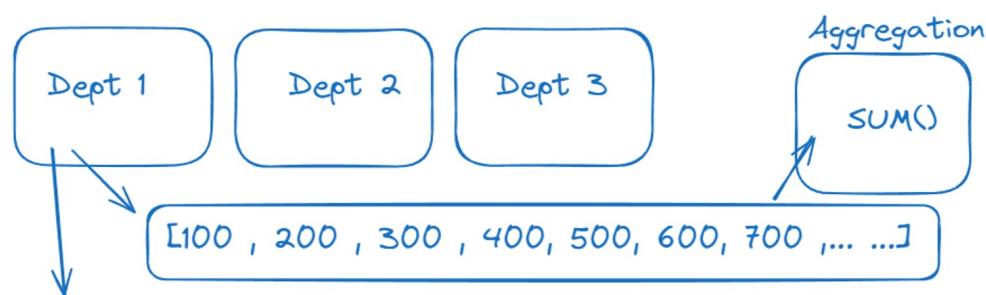
A	B	C	D	E	F	G	H	I	J	K	
1	Date	Injury	Gender	Age	Incident Type	Days Lost	Plant	Report Type	Shift	Department	Incident Cost
2	1-Jan-20	Multiple	Male	25-34	Burn	0	Iowa	Near Miss	Afternoon	Painting	0
3	3-Jan-20	N/A	Male	35-49	Vehicle	0.5	Alabama	Lost Time	Day	Fabrication	0
4	3-Jan-20	Eye	Male	18-24	Cut	0	Georgia	Near Miss	Day	Administration	0
5	4-Jan-20	Legs	Female	50+	Falling object	0	Iowa	Near Miss	Day	Painting	0
6	7-Jan-20	Legs	Male	25-34	Lifting	0	Ohio	Near Miss	Day	Painting	0
7	11-Jan-20	N/A	Female	50+	Crush & Pinch	0	Georgia	First Aid	Afternoon	Security	0
8	11-Jan-20	Neck	Male	25-34	Crush & Pinch	3.5	Iowa	Lost Time	Day	Purchasing	0
9	12-Jan-20	Feet	Male	35-49	Burn	1.5	California	Lost Time	Night	Administration	0
10	15-Jan-20	N/A	Male	18-24	Fall	0	Florida	First Aid	Afternoon	Maintenance	0
11	16-Jan-20	Arms	Male	50+	Crush & Pinch	4.5	Florida	Lost Time	Afternoon	Administration	0
12	18-Jan-20	N/A	Female	35-49	Falling object	0	Iowa	First Aid	Night	Shipping	0
13	23-Jan-20	Neck	Male	35-49	Crush & Pinch	0	Alabama	Medical Claim	Afternoon	Shipping	0
14	26-Jan-20	Eye	Male	35-49	Vehicle	0	Florida	Medical Claim	Day	Finishing	0
15	27-Jan-20	Eye	Male	50+	Burn	0	Texas	Medical Claim	Day	Maintenance	0

=QUERY(Info, "SELECT I , J WHERE F>3 AND K > 2000")

SafetyData!A1:K515

Info

Tab to accept



↓ [100 , 200 , 300 , 400, 500, 600, 700 ,... ...]

Group By + Aggregation Function.

=QUERY(Info, "SELECT J , SUM(K) GROUP BY J")

E	F
total incident cost for each department	
Department	sum Incident Cost
Administration	82903
Fabrication	55162
Finishing	72721
Maintenance	75642
Melting	80479
Painting	84113
Purchasing	74574
Security	90857
Shipping	101344

Unique Record

=QUERY(Info, "SELECT J , SUM(K) GROUP BY J")

J	K
Department	Incident Cost
Security	66
Melting	67
Fabrication	67
Fabrication	76
Finishing	77
Finishing	77
Administration	83
Fabrication	84
Shipping	88
Security	88
Maintenance	95
Fabrication	107
Fabrication	114
Security	115
Purchasing	115
Fabrication	118
Fabrication	118
Shipping	119

Group By - Unique

=QUERY(Info, "SELECT J , SUM(K) GROUP BY J ORDER BY SUM(K) DESC")

E	F	G
total incident cost for each department		
Department	sum Incident Cost	
Shipping	101344	
Security	90857	
Painting	84113	
Administration	82903	
Melting	80479	

By default Ascending , DESC - Descending

Painting	84113
Administration	82903
Melting	80479
Maintenance	75642
Purchasing	74574
Finishing	72721
Fabrication	55162

```
=QUERY(Info,"SELECT J , SUM(K) GROUP BY J ORDER BY SUM(K) DESC LABEL SUM(K) 'Total Incident Cost'")
```

E	F	G	H	I
total incident cost for each department				
Department	Total Incident Cost			
Shipping	101344			
Security	90857			
Painting	84113			
Administration	82903			
Melting	80479			
Maintenance	75642			
Purchasing	74574			
Finishing	72721			
Fabrication	55162			

Label always apply at the end.

```
=QUERY(Info,"SELECT J , SUM(K) GROUP BY J ORDER BY SUM(K) DESC LIMIT 5 LABEL SUM(K) 'Total Incident Cost'")
```

E	F	G	H	I
show top 5 departments with highest lost days				
Department	Total Incident Cost			
Shipping	101344			
Security	90857			
Painting	84113			
Administration	82903			
Melting	80479			

```
=QUERY(Info,"SELECT J , SUM(F) GROUP BY J ORDER BY SUM(F) DESC LIMIT 5 LABEL SUM(F) 'Total Lost Days' ")
```

E	F	G	H	I
show top 5 departments with highest lost days				
Department	Total Lost Days			
Fabrication	59.5			
Shipping	56.5			
Security	49.5			
Melting	49			
Administration	40			

if it lowest , just remove the DESC.