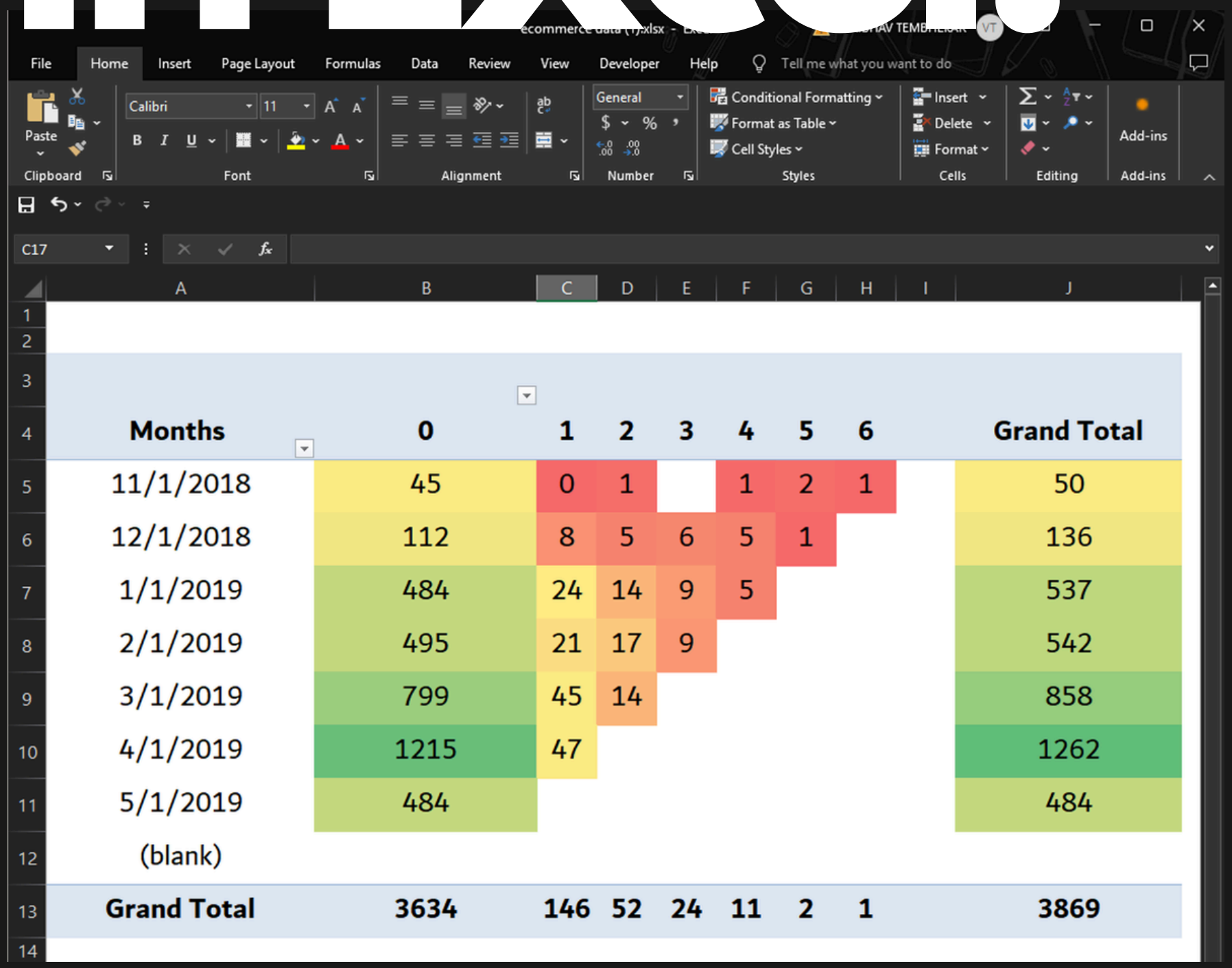
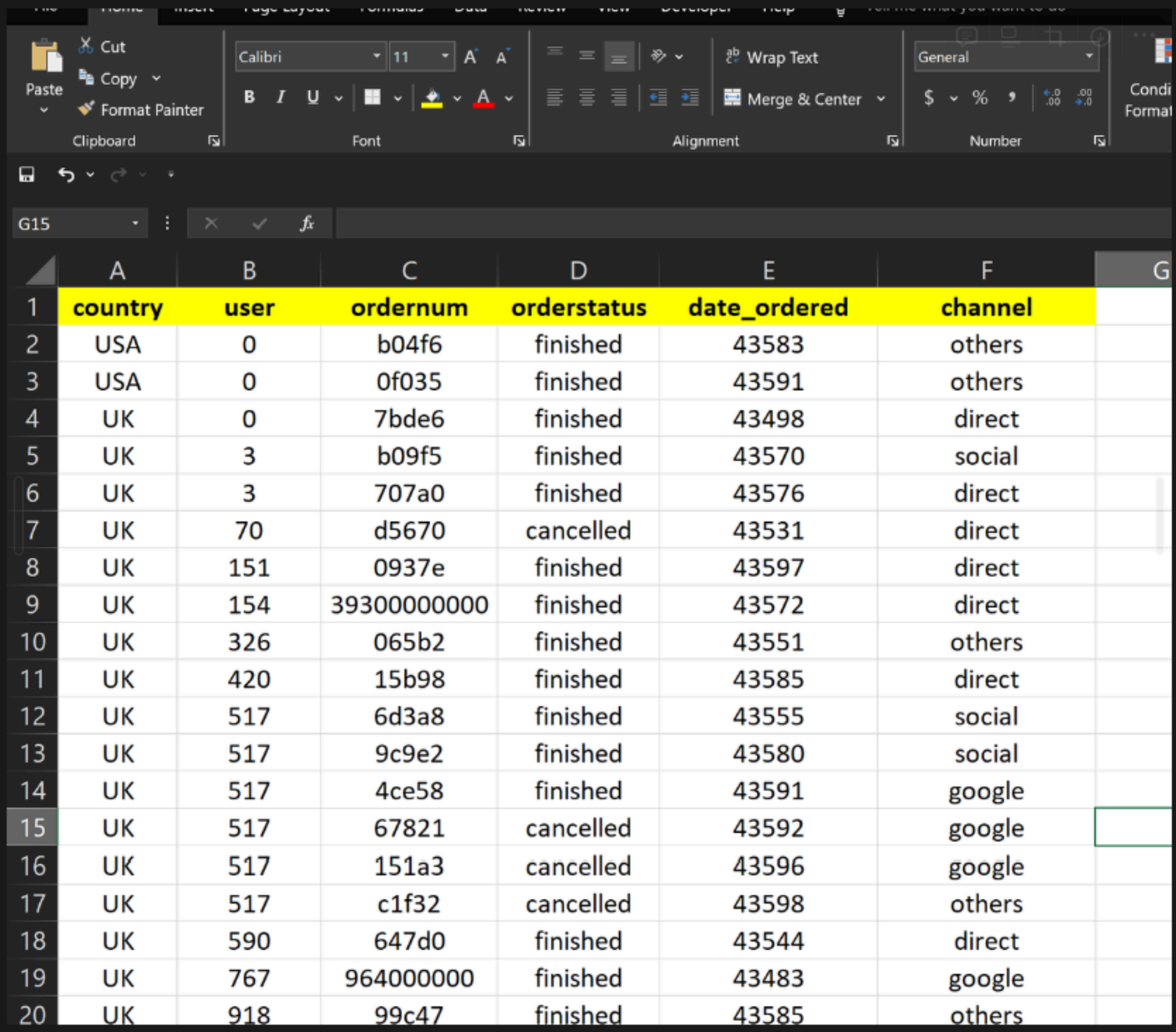
Cohort Analysis in Excel:



Months	0	1	2	3	4	5	6	Grand Total
11/1/2018	45	0	1		1	2	1	50
12/1/2018	112	8	5	6	5	1		136
1/1/2019	484	24	14	9	5			537
2/1/2019	495	21	17	9				542
3/1/2019	799	45	14					858
4/1/2019	1215	47						1262
5/1/2019	484							484
(blank)								
Grand Total	**3634**	**146**	**52**	**24**	**11**	**2**	**1**	**3869**

what the data looks like:



	country	user	ordernum	orderstatus	date_ordered	channel
2	USA	0	b04f6	finished	43583	others
3	USA	0	0f035	finished	43591	others
4	UK	0	7bde6	finished	43498	direct
5	UK	3	b09f5	finished	43570	social
6	UK	3	707a0	finished	43576	direct
7	UK	70	d5670	cancelled	43531	direct
8	UK	151	0937e	finished	43597	direct
9	UK	154	39300000000	finished	43572	direct
10	UK	326	065b2	finished	43551	others
11	UK	420	15b98	finished	43585	direct
12	UK	517	6d3a8	finished	43555	social
13	UK	517	9c9e2	finished	43580	social
14	UK	517	4ce58	finished	43591	google
15	UK	517	67821	cancelled	43592	google
16	UK	517	151a3	cancelled	43596	google
17	UK	517	c1f32	cancelled	43598	others
18	UK	590	647d0	finished	43544	direct
19	UK	767	964000000	finished	43483	google
20	UK	918	99c47	finished	43585	others

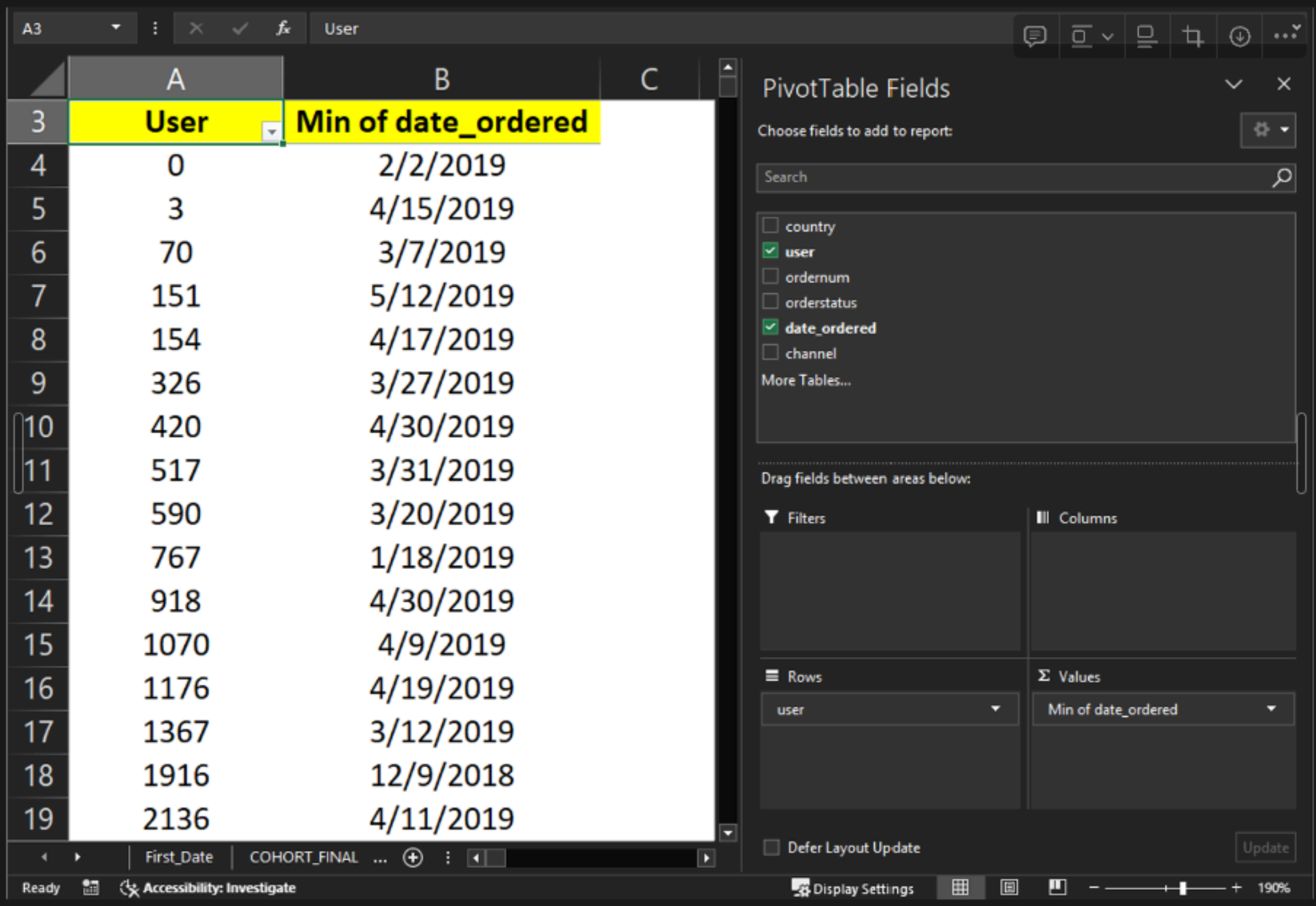
Link to the Dataset (CSV):

1Fsj4qMQtvi33CAb_fe6isAkwdVXAprjvWOJgBCiB6qE
https://docs.google.com

Connect to Google Drive to update

STEP 1 : Finding the First order date

Created a pivot table on user and their first ever order.



STEP 2 : Finding the First order date

Copied that data to the original sheet.

```
=VLOOKUP(B:B,First_Date!$A$3:$B$3873,2,FALSE)
```

	A	B	C	D	E	F	G
1	country	user	ordernum	orderstatus	date_ordered	channel	First order date
2	USA	0	b04f6	finished	4/28/2019	others	2/2/2019
3	USA	0	0f035	finished	5/6/2019	others	2/2/2019
4	UK	0	7bde6	finished	2/2/2019	direct	2/2/2019
5	UK	3	b09f5	finished	4/15/2019	social	4/15/2019
6	UK	3	707a0	finished	4/21/2019	direct	4/15/2019
7	UK	70	d5670	cancelled	3/7/2019	direct	3/7/2019
8	UK	151	0937e	finished	5/12/2019	direct	5/12/2019
9	UK	154	39300000000	finished	4/17/2019	direct	4/17/2019
10	UK	326	065b2	finished	3/27/2019	others	3/27/2019
11	UK	420	15b98	finished	4/30/2019	direct	4/30/2019
12	UK	517	6d3a8	finished	3/31/2019	social	3/31/2019
13	UK	517	9c9e2	finished	4/25/2019	social	3/31/2019
14	UK	517	4ce58	finished	5/6/2019	google	3/31/2019
15	UK	517	67821	cancelled	5/7/2019	google	3/31/2019
16	UK	517	151a3	cancelled	5/11/2019	google	3/31/2019
17	UK	517	c1f32	cancelled	5/13/2019	others	3/31/2019
18	UK	590	647d0	finished	3/20/2019	direct	3/20/2019
19	UK	767	964000000	finished	1/18/2019	google	1/18/2019
20	UK	918	99c47	finished	4/30/2019	others	4/30/2019
21	UK	1070	113ae	finished	4/9/2019	direct	4/9/2019
22	UK	1176	78371	cancelled	4/19/2019	social	4/19/2019

STEP 3: Finding the Difference in the First Order Date & Order Date

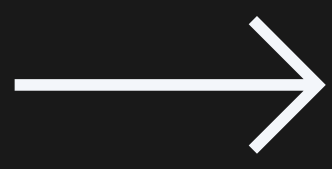
To do this, I first created two new columns, 'data_ordered new' and 'First order date new', and set them to the first day of their respective months, as I only needed the difference in months.

```
=EOMONTH(G1,-1)+1
```

& For calculating the difference in months, I used:

```
=ROUND((H2-I2)/30,0)
```

G	H	I	J
First order date	date_ordered new	First order date new	months diff
2/2/2019	4/1/2019	2/1/2019	2
2/2/2019	5/1/2019	2/1/2019	3
2/2/2019	2/1/2019	2/1/2019	0
4/15/2019	4/1/2019	4/1/2019	0
4/15/2019	4/1/2019	4/1/2019	0
3/7/2019	3/1/2019	3/1/2019	0
5/12/2019	5/1/2019	5/1/2019	0
4/17/2019	4/1/2019	4/1/2019	0
3/27/2019	3/1/2019	3/1/2019	0
4/30/2019	4/1/2019	4/1/2019	0
3/31/2019	3/1/2019	3/1/2019	0
3/31/2019	4/1/2019	3/1/2019	1



STEP 4: Then, I calculated how many times a user placed an order in the same month.

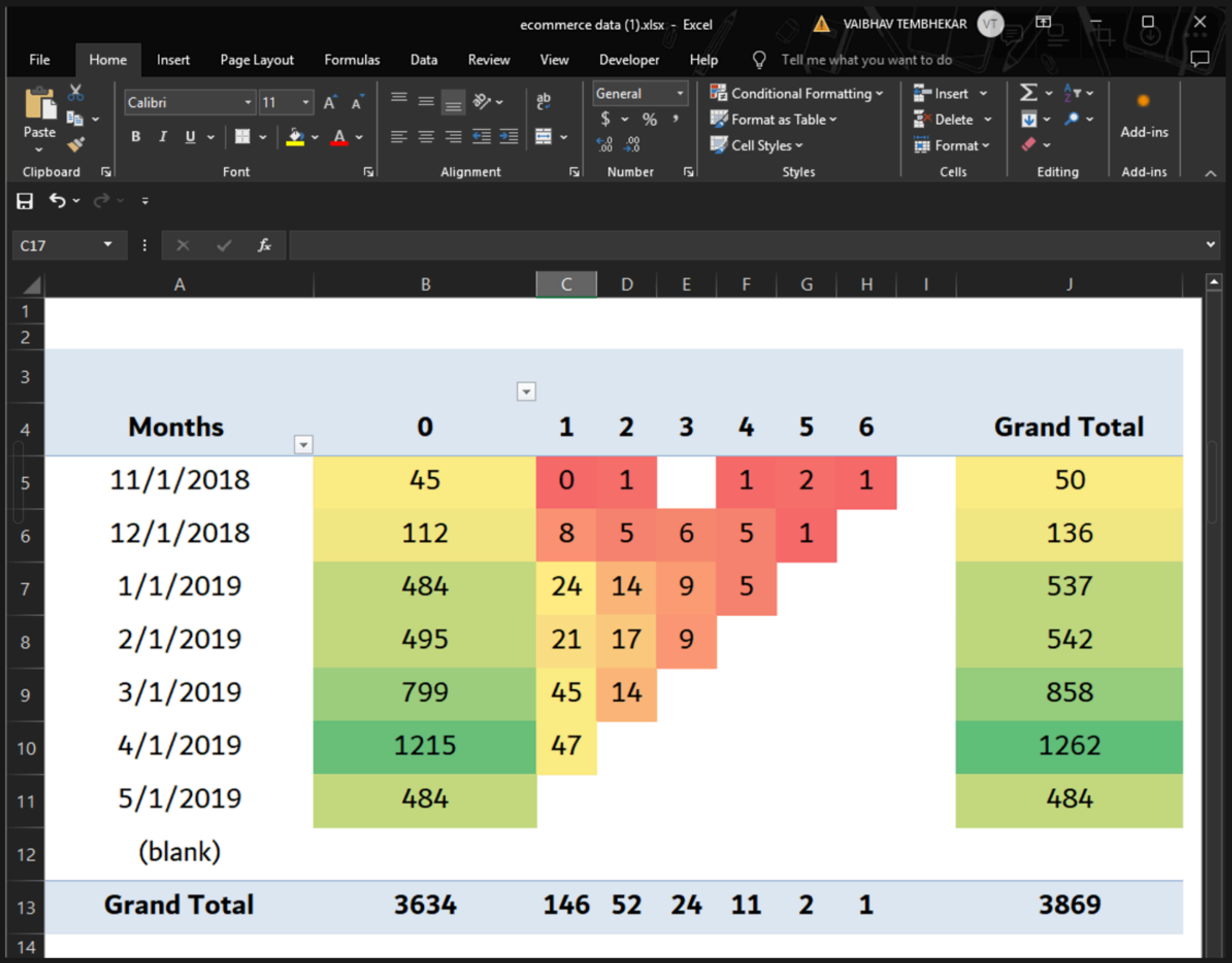
I did this using countifs().

```
=1/COUNTIFS(I$2:I$1048576,I2,B$2:B$1048576,B2)
```

UNICODE | =1/COUNTIFS(I$2:I$1048576,I2,B$2:B$1048576,B2)

	A	B	C	D	E	F	G	H	I	J	K
1	country	user	ordernum	orderstatus	date_ordered	channel	First order date	date_ordered new	First order date new	months diff	
2	USA	0	b04f6	finished	4/28/2019	others	2/2/2019	4/1/2019	2/1/2019	2	COUNTIFS
3	USA	0	0f035	finished	5/6/2019	others	2/2/2019	5/1/2019	2/1/2019	3	
4	UK	0	7bde6	finished	2/2/2019	direct	2/2/2019	2/1/2019	2/1/2019	0	
5	UK	3	b09f5	finished	4/15/2019	social	4/15/2019	4/1/2019	4/1/2019	0	
6	UK	3	707a0	finished	4/21/2019	direct	4/15/2019	4/1/2019	4/1/2019	0	
7	UK	70	d5670	cancelled	3/7/2019	direct	3/7/2019	3/1/2019	3/1/2019	0	
8	UK	151	0937e	finished	5/12/2019	direct	5/12/2019	5/1/2019	5/1/2019	0	
9	UK	154	39300000000	finished	4/17/2019	direct	4/17/2019	4/1/2019	4/1/2019	0	
10	UK	326	065b2	finished	3/27/2019	others	3/27/2019	3/1/2019	3/1/2019	0	
11	UK	420	15b98	finished	4/30/2019	direct	4/30/2019	4/1/2019	4/1/2019	0	
12	UK	517	6d3a8	finished	3/31/2019	social	3/31/2019	3/1/2019	3/1/2019	0	
13	UK	517	9c9e2	finished	4/25/2019	social	3/31/2019	4/1/2019	3/1/2019	1	
14	UK	517	4ce58	finished	5/6/2019	google	3/31/2019	5/1/2019	3/1/2019	2	
15	UK	517	67821	cancelled	5/7/2019	google	3/31/2019	5/1/2019	3/1/2019	2	
16	UK	517	151a3	cancelled	5/11/2019	google	3/31/2019	5/1/2019	3/1/2019	2	
17	UK	517	c1f32	cancelled	5/13/2019	others	3/31/2019	5/1/2019	3/1/2019	2	
18	UK	590	647d0	finished	3/20/2019	direct	3/20/2019	3/1/2019	3/1/2019	0	
19	UK	767	964000000	finished	1/18/2019	google	1/18/2019	1/1/2019	1/1/2019	0	
20	UK	918	99c47	finished	4/30/2019	others	4/30/2019	4/1/2019	4/1/2019	0	
21	UK	1070	113ae	finished	4/9/2019	direct	4/9/2019	4/1/2019	4/1/2019	0	
22	UK	1176	78371	cancelled	4/19/2019	social	4/19/2019	4/1/2019	4/1/2019	0	
23	UK	1367	1f903	finished	3/12/2019	google	3/12/2019	3/1/2019	3/1/2019	0	
24	UK	1367	4a898	finished	4/29/2019	others	3/12/2019	4/1/2019	3/1/2019	1	
25	UK	1916	68023	finished	12/9/2018	others	12/9/2018	12/1/2018	12/1/2018	0	
26	UK	1916	78542	cancelled	12/10/2018	direct	12/9/2018	12/1/2018	12/1/2018	0	
27	UK	1916	9b3ea	finished	12/10/2018	direct	12/9/2018	12/1/2018	12/1/2018	0	
28	UK	2136	dda2e	finished	4/11/2019	social	4/11/2019	4/1/2019	4/1/2019	0	
29	UK	2606	25234	finished	3/26/2019	direct	3/26/2019	3/1/2019	3/1/2019	0	
30	UK	2670	96f60	finished	3/24/2019	google	3/24/2019	3/1/2019	3/1/2019	0	
31	UK	3152	8ead2	finished	4/28/2019	google	4/28/2019	4/1/2019	4/1/2019	0	

STEP 5: The final step is to create a pivot table and the cohort.



Months	0	1	2	3	4	5	6	Grand Total
11/1/2018	45	0	1		1	2	1	50
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5/1/2019	484							484
(blank)								
Grand Total	**3634**	**146**	**52**	**24**	**11**	**2**	**1**	**3869**