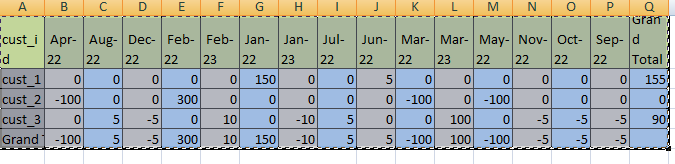
**SQL Pivot**

Input Table

|  |  |  |
| --- | --- | --- |
| **Sales\_date** | **Cust\_id** | **Amount** |
| 01-Jan-22 | cust\_1 | 50$ |
| 02-Jan-22 | cust\_1 | 50$ |
| 03-Jan-22 | cust\_1 | 50$ |
| 01-Feb-22 | cust\_2 | 100$ |
| 02-Feb-22 | cust\_2 | 100$ |
| 03-Feb-22 | cust\_2 | 100$ |
| 01-Mar-22 | cust\_2 | -100$ |
| 01-Apr-22 | cust\_2 | -100$ |
| 01-May-22 | cust\_2 | -100$ |
| 01-Jun-22 | cust\_1 | 5$ |
| 01-Jul-22 | cust\_3 | 5$ |
| 01-Aug-22 | cust\_3 | 5$ |
| 01-Sep-22 | cust\_3 | -5$ |
| 01-Oct-22 | cust\_3 | -5$ |
| 01-Nov-22 | cust\_3 | -5$ |
| 01-Dec-22 | cust\_3 | -5$ |
| 01-Jan-23 | cust\_3 | -10$ |
| 01-Feb-23 | cust\_3 | 10$ |
| 01-Mar-23 | cust\_3 | 100$ |

We need to convert it to this below format



**In SQl server:**

**Syntax:**

Select \* from (base query) alias

Pivot (aggregation query

For column\_name in ([col\_1], [col\_2], [col\_3] ) alias

Base Quarry, It will remove $ symbol and extract the date in asked format

Code for upper Problem:

with tx as (

select \* from (

select

cust\_id, format(sales\_date, 'MMM-yy') as sales\_date,

cast(replace(amount, '$', '') as int) as amount

from prac)

as base\_t

pivot(

Aggregation query

sum(amount) for sales\_date in(

[jan-01],

[jan-22],

[feb-22],

[mar-22],

[apr-22],

[may-22],

[jun-22],

[jul-22],

[aug-22],

[sep-22],

[oct-22],

[nov-22],

[dec-22]) ) as piv\_t

Union with the same quarry to merge the total, here total is hard coded and the alias is given cust\_id so Total will come as a value in the same column

union

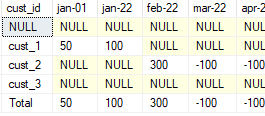
select \* from (

select 'Total' as

cust\_id, format(sales\_date, 'MMM-yy') as sales\_date,

cast(replace(amount, '$', '') as int) as amount

from prac) as base\_t



Null values are present need to treat them

pivot(

sum(amount) for sales\_date in(

[jan-01],

[jan-22],

[feb-22],

[mar-22],

[apr-22],

[may-22],

[jun-22],

[jul-22],

[aug-22],

[sep-22],

[oct-22],

[nov-22],

**First cte table closed here the alias was tx**

[dec-22]) ) as piv\_t),

not\_null

as ( select cust\_id,

isnull([jan-01], 0) as jan\_01,

This code will replace the null value with 0

isnull([jan-22], 0) as jan\_22,

coalesce([feb-22], 0) as feb\_22,

coalesce([mar-22], 0) as mar\_22,

coalesce([apr-22], 0) as apr\_22,

coalesce([may-22], 0) as may\_22,

coalesce([jun-22], 0) as jun\_22,

coalesce([jul-22], 0) as jul\_22,

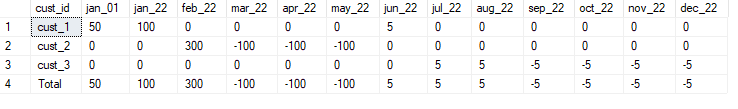
coalesce([aug-22], 0) as aug\_22,

coalesce([sep-22], 0) as sep\_22,

coalesce([oct-22],0) oct\_22,

isnull([nov-22], 0) nov\_22,

coalesce([dec-22],0) as dec\_22 from tx),



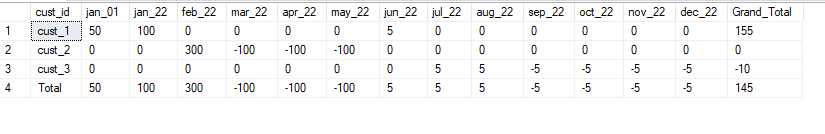
grand\_total as (

select \*,

(jan\_01 + feb\_22 + jan\_22 + mar\_22+ apr\_22+may\_22 + jun\_22+jul\_22+aug\_22 + sep\_22 + oct\_22+ nov\_22 + dec\_22) as Grand\_Total

from not\_null)

This part will add the right side grand total



But column level aggregation we need to remove from grand\_toal

select cust\_id, jan\_01, feb\_22,

jan\_22,

mar\_22,

apr\_22,

may\_22,

jun\_22,

jul\_22,

aug\_22,

sep\_22,

oct\_22,

nov\_22,

dec\_22, case when cust\_id ='Total' then '' else

This part will stop row level aggregation. And return 0 in last of Grand\_total column

(jan\_01

+ feb\_22 + jan\_22 + mar\_22 + apr\_22 + may\_22 +

jun\_22 + jul\_22 + aug\_22 + sep\_22 + oct\_22 +

nov\_22 + dec\_22) end Grand\_Total

from grand\_total

