

### Table: Stadium

Each row of this table contains the visit date and visit id to the stadium with the number of people during the visit. No two rows will have the same visit\_date, and as the id increases, the dates increase as well.

**Write an SQL query to display the records with three or more rows with consecutive id's, and the number of people is greater than or equal to 100 for each.**

**Return the result table ordered by visit\_date in ascending order.**

#### Input

| id | visit_date | visit_date |
|----|------------|------------|
| 1  | 2017-01-01 | 10         |
| 2  | 2017-01-02 | 109        |
| 3  | 2017-01-03 | 150        |
| 4  | 2017-01-04 | 99         |
| 5  | 2017-01-05 | 145        |
| 6  | 2017-01-06 | 1455       |
| 7  | 2017-01-07 | 199        |
| 8  | 2017-01-09 | 188        |



#### Output

| id | visit_date | visit_date |
|----|------------|------------|
| 5  | 2017-01-05 | 145        |
| 6  | 2017-01-06 | 1455       |
| 7  | 2017-01-07 | 199        |
| 8  | 2017-01-09 | 188        |

## Input

| id | visit_date | visit_date |
|----|------------|------------|
| 1  | 2017-01-01 | 10         |
| 2  | 2017-01-02 | 109        |
| 3  | 2017-01-03 | 150        |
| 4  | 2017-01-04 | 99         |
| 5  | 2017-01-05 | 145        |
| 6  | 2017-01-06 | 1455       |
| 7  | 2017-01-07 | 199        |
| 8  | 2017-01-09 | 188        |



```
Select *  
From stadium  
Where people > 100;
```



## Output

| id | visit_date | visit_date |
|----|------------|------------|
| 2  | 2017-01-02 | 109        |
| 3  | 2017-01-03 | 150        |
| 5  | 2017-01-05 | 145        |
| 6  | 2017-01-06 | 1455       |
| 7  | 2017-01-07 | 199        |
| 8  | 2017-01-09 | 188        |

| id | visit_date | visit_date |
|----|------------|------------|
| 1  | 2017-01-01 | 10         |
| 2  | 2017-01-02 | 109        |
| 3  | 2017-01-03 | 150        |
| 4  | 2017-01-04 | 99         |
| 5  | 2017-01-05 | 145        |
| 6  | 2017-01-06 | 1455       |
| 7  | 2017-01-07 | 199        |
| 8  | 2017-01-09 | 188        |



```
Select s.* ,  
Row_Number() Over(Order By s.visit_date) rn  
From stadium s Where people > 100;
```



| id | visit_date | visit_date | rn |
|----|------------|------------|----|
| 2  | 2017-01-02 | 109        | 1  |
| 3  | 2017-01-03 | 150        | 2  |
| 5  | 2017-01-05 | 145        | 3  |
| 6  | 2017-01-06 | 1455       | 4  |
| 7  | 2017-01-07 | 199        | 5  |
| 8  | 2017-01-09 | 188        | 6  |

## Input

| id | visit_date | visit_date |
|----|------------|------------|
| 1  | 2017-01-01 | 10         |
| 2  | 2017-01-02 | 109        |
| 3  | 2017-01-03 | 150        |
| 4  | 2017-01-04 | 99         |
| 5  | 2017-01-05 | 145        |
| 6  | 2017-01-06 | 1455       |
| 7  | 2017-01-07 | 199        |
| 8  | 2017-01-09 | 188        |



```
Select s.* ,  
       Row_Number() Over(Order By s.visit_date) rn,  
       (id - Row_Number() Over(Order By s.visit_date)) as grp  
From stadium s  
Where people > 100;
```



## Output

| id | visit_date | visit_date | rn | grp |
|----|------------|------------|----|-----|
| 2  | 2017-01-02 | 109        | 1  | 1   |
| 3  | 2017-01-03 | 150        | 2  | 1   |
| 5  | 2017-01-05 | 145        | 3  | 2   |
| 6  | 2017-01-06 | 1455       | 4  | 2   |
| 7  | 2017-01-07 | 199        | 5  | 2   |
| 8  | 2017-01-09 | 188        | 6  | 2   |

| id | visit_date | visit_date |
|----|------------|------------|
| 1  | 2017-01-01 | 10         |
| 2  | 2017-01-02 | 109        |
| 3  | 2017-01-03 | 150        |
| 4  | 2017-01-04 | 99         |
| 5  | 2017-01-05 | 145        |
| 6  | 2017-01-06 | 1455       |
| 7  | 2017-01-07 | 199        |
| 8  | 2017-01-09 | 188        |



```
With group_data As  
(  
  Select s.* ,  
         Row_Number() Over(Order By s.visit_date) rn,  
         (id - Row_Number() Over(Order By s.visit_date)) as grp  
  From stadium s  
  Where people > 100  
)  
Select grp, count(1) as count  
From group_data  
Group By grp;
```



| grp | count |
|-----|-------|
| 1   | 2     |
| 2   | 4     |

## Input

| id | visit_date | visit_date |
|----|------------|------------|
| 1  | 2017-01-01 | 10         |
| 2  | 2017-01-02 | 109        |
| 3  | 2017-01-03 | 150        |
| 4  | 2017-01-04 | 99         |
| 5  | 2017-01-05 | 145        |
| 6  | 2017-01-06 | 1455       |
| 7  | 2017-01-07 | 199        |
| 8  | 2017-01-09 | 188        |



```
With group_data As
(
    Select s.* ,
           Row_Number() Over(Order By s.visit_date) rn,
           (id - Row_Number() Over(Order By s.visit_date)) as grp
    From stadium s
    Where people > 100
)
Select grp
  From group_data
 Group By grp
Having count(1) >= 3;
```



## Output

| grp |
|-----|
| 2   |

| id | visit_date | visit_date |
|----|------------|------------|
| 1  | 2017-01-01 | 10         |
| 2  | 2017-01-02 | 109        |
| 3  | 2017-01-03 | 150        |
| 4  | 2017-01-04 | 99         |
| 5  | 2017-01-05 | 145        |
| 6  | 2017-01-06 | 1455       |
| 7  | 2017-01-07 | 199        |
| 8  | 2017-01-09 | 188        |



```
With group_data As
(
    Select s.* ,
           Row_Number() Over(Order By s.visit_date) rn,
           (id - Row_Number() Over(Order By s.visit_date)) as grp
    From stadium s
    Where people > 100
)
Select *
  From group_data
 Where grp In (
    Select grp
      From group_data
     Group By grp
    Having count(1) >= 3
  )
;
```



| id | visit_date | visit_date | rn | grp |
|----|------------|------------|----|-----|
| 5  | 2017-01-05 | 145        | 3  | 2   |
| 6  | 2017-01-06 | 1455       | 4  | 2   |
| 7  | 2017-01-07 | 199        | 5  | 2   |
| 8  | 2017-01-09 | 188        | 6  | 2   |