

GROUP BY() CLAUSE:

- By default, all the MRF's will create a single group and it will provide a single record as output.
- If we want multiple records as output from MRF, then we should create multiple groups.
- In order to create multiple groups we use the group by() clause.
- The group by() clause is used to group the records.

Syntax:

Select group_by expression

From Table_Name

Where <Condition>

Group by Column_Name/Expression;

Order of Execution:

1. From
2. Where (if used)[ROW-BY-ROW]
3. Group By [ROW-BY-ROW]
4. SELECT [GROUP-BY-GROUP]

Note:

- Group by clause is used to group the records.
- Group by clause executes row by row.
- After the execution of the Group by clause we get groups.
- The Column_Name or expression used for grouping can be used in the select clause.
- Group by clause can be used without using the Where clause.

HAVING CLAUSE ():

- Having () clause is used to filter the groups.
- Having clause will execute after the group by () clause.
- Having () clause is mainly used to write multi-row as a condition.

Syntax:

Select group_by_expression

From Table_Name

Where <Condition>

Group by Column_Name/Expression

Having <Condition>MRF/Column_Name/Expressions

Order of Execution

1. FROM
 2. WHERE (if used) [ROW-BY-ROW]
 3. GROUP BY [ROW-BY-ROW]
 4. HAVING [GROUP-BY-GROUP]
 5. SELECT [GROUP-BY-GROUP]
- The Having clause() is a dependent clause and it depends on the group by clause().
 - The Having clause() will execute group by group.

Difference between Where Clause() and Having Clause()

Where Clause()	Having Clause()
➤ Where Clause() will execute row by row.	➤ Having Clause will execute group by group
➤ We cannot write MRF as Condition.	➤ We can write MRF as a condition.
➤ Where Clause() will filter ungrouped records.	➤ Having clause() will filter grouped records.
➤ We can write where clause() even if there is no group by clause.	➤ We cannot write having clause if there is no group by clause.
➤ Where Clause() will execute before group by clause.	➤ Having Clause() will execute after group by clause.
➤ We can write any column as a condition in where clause.	➤ We can write a column as a condition only if the column is present in group by clause.