

Note :-

Null value is discarded by the aggregate function.

→ Type of Clauses :-

Group By Clause :- (i) list the total salary of each department in department table.

Well should be some thing common (like some column) of dept id

select dept name, dept id, sum(salary) As total salary from department Group by dept id;

O/p →

dept name	dept id	total salary
BCA	20	20000
PGDCA	20	15000
BSc	30	35000

(ii) list the average salary of each department in department table.

select dept name, dept id, avg(salary) As Average salary from department Group by dept id;

O/p →

dept name	dept id	Average salary
BCA	10	15000
PGDCA	20	15000
BSc	30	17500

Having clause :- It is used to filter the data

based on group function. It is used to specify which group is to be displayed i.e. restrict the group that you return based upon group function. Condition in having clause must be used with aggregation function.

query :-

- (i) list the department whose total salary greater than or equal to 30000

select dept-name, dept-id, sum(salary) As total-salary from department Group by dept-id having sum(salary) $\geq$ 30000;

O/p $\rightarrow$

dept name	dept id	total-salary
BCA	10	30000
BSc	30	35000

- (ii) list the department name whose ~~total~~ average salary greater than or equal to 16000

select dept-name, dept-id, Avg(salary) As average-salary from department Group by dept-id having Avg(salary) $\geq$ 16000

O/p $\rightarrow$

dept name	dept id	Average-salary
BSc	30	17500

Note $\rightarrow$ The having clause behave like a where clause. But it is applicable to the groups where as

where clause is applicable to individual table not group.

- Where clause not be used with aggregation function.

eg, dep-id having $\text{avg}(\text{salary}) \geq 16000;$

having is used with group by

dep-id where $\text{avg}(\text{salary}) \geq 16000;$

where does not need.

Order By clause - It is used to sort the given values in ascending and descending orders. by default this clause give the ascending order values.

Order by column Name [ASC]

query $\rightarrow$ list the name of employee and salary of department table. according to the salary in ascending order.

if ascending then by default it is ascending not salary

select ename, salary from department Order by salary;

$\rightarrow$ by

O/P $\rightarrow$

e name	Salary
AKash	10,000
Anit	20,000
Suraj	15,000
Rahul	15,000
Vogesh	20,000
Ajay	null