PRACTICAL ON GROUP BY HAVING CLAUSES

description

syntax for group clause:

- SELECT column1, function_name(column2)
  FROM table_name
  WHERE condition
  GROUP BY column1, column2
  ORDER BY column1, column2;

syntax for order:

- SELECT * FROM table_name ORDER BY column_name ASC | DESC
  //Where
  table_name: name of the table.
  column_name: name of the column according to which the data
  is needed to be arranged.
  ASC: to sort the data in ascending order.
  DESC: to sort the data in descending order.
  | : use either ASC or DESC to sort in ascending or descending order//

syntax for having clause

- SELECT col_1, function_name(col_2)
  FROM tablename
  WHERE condition
  GROUP BY column1, column2
  HAVING Condition
  ORDER BY column1, column2;

syntax for where clause

- SELECT column1,column2 FROM table_name WHERE column_name operator value;

table creation;

```
SQL> create table emp1234
  2  (
  3  id number(5) not null primary key,
  4  name char(10),
  5  department char(8),
  6  salary number(6),
  7  gender char(6),
  8  comm number(6),
  9  city char(8)
 10  );

Table created.


SQL> select * from emp1234;

        ID NAME       DEPARTME     SALARY GENDER       COMM CITY
---------- ---------- -------- ---------- ------ ---------- --------
      1001 john       it            35000 male         3500 london
      1002 smith      hr            45000 female       4500 mumbai
      1003 jams       finance       50000 male         5000 delhi
      1004 mike       finance       50000 male            0 london
      1005 linda      hr            75000 female          0 mumbai
      1006 anurag     it            35000 male            0 london
      1007 priyanla   hr            45000 female          0 mumbai
      1008 sambit     it            55000 male         5500 london
      1009 pranaya    it            57000 male         5700 london
     10010 hina       hr            75000 female       7500 mumbai
     10011 mai        finance       75000 female       7500 mumbai

        ID NAME       DEPARTME     SALARY GENDER       COMM CITY
---------- ---------- -------- ---------- ------ ---------- --------
     10012 laxmi      it            35000 female       3500 london
     10013 nikhil     it            35000 male         3500 london

13 rows selected.
```

Q.1 How many employees working in each department?

```
SQL> select department,count(*) as total_employee from emp1234 group by department;

DEPARTME TOTAL_EMPLOYEE
-------- --------------
finance               3
it                    6
hr                    4
```

Q.2 Find the total salary given to all employees department wise

```
SQL> select department,sum(salary) as total_salary from emp1234 group by department;

DEPARTME TOTAL_SALARY
-------- ------------
finance        175000
it             252000
hr             240000
```

Q.3 Display total no of employees lives per city

```
SQL> select city,count(*) as city_employee from emp1234 group by city;

CITY     CITY_EMPLOYEE
-------- -------------
delhi                1
mumbai               5
london               7
```

Q.4 Display count of male and female employees working for each department

```
SQL> select department,gender,count(*) as total_employe_count
  2  from emp1234 group by department,gender
  3  order by department;

DEPARTME GENDER TOTAL_EMPLOYE_COUNT
-------- ------ -------------------
finance  female                   1
finance  male                     2
hr       female                   4
it       female                   1
it       male                     5
```

Q.5 Find the total salaries and the total number of employees by City, and by gender

```
SQL> select city,gender,sum(salary) as total_salary,count(id) as total_employee
  2  from emp1234
  3  group by city,gender;

CITY     GENDER TOTAL_SALARY TOTAL_EMPLOYEE
-------- ------ ------------ --------------
mumbai   female       315000              5
london   female        35000              1
london   male          267000              6
delhi    male           50000              1
```

Q.6 Display average salary given for every department

```
SQL> select department,avg(salary) as avg_salary from emp1234
  2  group by department;

DEPARTME AVG_SALARY
-------- ----------
finance  58333.3333
it            42000
hr            60000
```

Q.7 Total salary given to all employees who are working in London

```
SQL> select city,sum(salary) as total_salary from emp1234
  2  where city='london'
  3  group by city;

CITY     TOTAL_SALARY
-------- ------------
london         302000
```

Q.8 Retrieve the total salary of all the Male employees who are working in London

```
SQL> select city,sum(salary) as total_salary from emp1234
  2  where gender='male'
  3  group by city
  4  having city='london';

CITY     TOTAL_SALARY
-------- ------------
london         267000
```

Q.9 Display department names who are giving salary more than 150000

```
SQL> SELECT Department, sum(salary) as Salary
  2  FROM emp1234
  3  GROUP BY department
  4  HAVING SUM(salary) > 150000;

DEPARTME     SALARY
-------- ----------
finance      175000
it           252000
hr           240000
```

Q.10 Show department names who strength is more than 3

```
SQL>
SQL>
SQL>
SQL>
SQL> SELECT department
  2    FROM emp1234
  3    GROUP BY department
  4            HAVING COUNT(*) > 3;

DEPARTME
--------
it
hr
```