```
SQL> desc emp1;
 Name                                      Null?    Type
 ----------------------------------------- -------- -----------------------------
 ENO                                       NOT NULL NUMBER
 ENAME                                              VARCHAR2(15)
 JOB                                                VARCHAR2(15)

SQL> desc stud1;
 Name                                      Null?    Type
 ----------------------------------------- -------- -----------------------------
 RNO                                                NUMBER
 SNAME                                              CHAR(10)
 M1                                                 NUMBER
 M2                                                 NUMBER
 TOTAL                                              NUMBER
 AVERAGE                                            NUMBER(5,2)

SQL> select *From stud1;

       RNO SNAME             M1         M2      TOTAL    AVERAGE
---------- ---------- ---------- ---------- ---------- ----------
       101 Anu               90         95        188         94
       102 Harsha            96         95        191       95.5
       103 Haritha           91         93        184         92

SQL> create view stud5 as select rno,sname,total,average from stud1;

View created.

SQL> select *from stud5;

       RNO SNAME           TOTAL    AVERAGE
---------- ---------- ---------- ----------
       101 Anu              188         94
       102 Harsha           191       95.5
       103 Haritha          184         92

SQL> commit;

Commit complete.

SQL> insert into stud1 (rno,sname,m1,m2) values(104,'Ram',95,96);

1 row created.

SQL> insert into stud1 (rno,sname,m1,m2) values(105,'sam',91,76);

1 row created.

SQL> select *from stud5;
```

```
       RNO SNAME         TOTAL    AVERAGE
---------- ---------- ---------- ----------
       101 Anu            188         94
       102 Harsha         191       95.5
       103 Haritha        184         92
       104 Ram
       105 sam

SQL> update stud1 set total=m1+m2,average=(m1+m2)/2;

5 rows updated.

SQL> select *from stud5;

       RNO SNAME         TOTAL    AVERAGE
---------- ---------- ---------- ----------
       101 Anu            185       92.5
       102 Harsha         191       95.5
       103 Haritha        184         92
       104 Ram            191       95.5
       105 sam            167       83.5

SQL> select *from stud1;

       RNO SNAME           M1         M2      TOTAL    AVERAGE
---------- ---------- ---------- ---------- ---------- ----------
       101 Anu            90         95        185       92.5
       102 Harsha         96         95        191       95.5
       103 Haritha        91         93        184         92
       104 Ram            95         96        191       95.5
       105 sam            91         76        167       83.5

SQL> create table sales_order_details(s_order_no varchar2(5),prod_no
varchar2(8),qty_order number,qty_dpt number,prod_rate number);

Table created.

SQL> desc sales_order_details;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 S_ORDER_NO                                         VARCHAR2(5)
 PROD_NO                                            VARCHAR2(8)
 QTY_ORDER                                          NUMBER
 QTY_DPT                                            NUMBER
 PROD_RATE                                          NUMBER

SQL> insert into sales_order_details values('s1001','p001',10,5,250);

1 row created.
```

```
SQL> insert into sales_order_details values('s1002','p002',15,10,400);

1 row created.

SQL> insert into sales_order_details values('s1003','p003',25,15,500);

1 row created.

SQL> insert into sales_order_details values('s1004','p004',35,20,700);

1 row created.

SQL> select *from sales_order_details;

S_ORD PROD_NO   QTY_ORDER    QTY_DPT  PROD_RATE
----- --------  ----------  ---------- ----------
s1001 p001             10          5        250
s1002 p002             15         10        400
s1003 p003             25         15        500
s1004 p004             35         20        700

SQL> insert into sales_order_details values('s1005','p001',50,30,250);

1 row created.

SQL> insert into sales_order_details values('s1006','p003',40,20,500);

1 row created.

SQL> insert into sales_order_details values('s1005','p001',60,20,250);

1 row created.

SQL> select *from sales_order_details;

S_ORD PROD_NO   QTY_ORDER    QTY_DPT  PROD_RATE
----- --------  ----------  ---------- ----------
s1001 p001             10          5        250
s1002 p002             15         10        400
s1003 p003             25         15        500
s1004 p004             35         20        700
s1005 p001             50         30        250
s1006 p003             40         20        500
s1005 p001             60         20        250

7 rows selected.

SQL> select prod_no,sum(Qty_order)
  2  "Total Qty Ordered" from sales_order_details group by prod_no;
```

```
PROD_NO   Total Qty Ordered
--------  -----------------
p004                     35
p001                    120
p002                     15
p003                     65

SQL> select prod_no,sum(Qty_Order)
  2  "Total Qty Ordered" from sales_order_details group by prod_no having prod_no
in "('p001','p002');
ERROR:
ORA-01740: missing double quote in identifier


SQL> select prod_no,sum(Qty_Order)"Total Qty Ordered" from sales_order_details
group by prod_no having prod_no in ('p001','p002');

PROD_NO   Total Qty Ordered
--------  -----------------
p001                    120
p002                     15

SQL> select prod_no,sum(Qty_Order)"Total Qty Ordered" from sales_order_details
group by prod_no having prod_no in ('p001','p003');

PROD_NO   Total Qty Ordered
--------  -----------------
p001                    120
p003                     65

SQL> select prod_no,sum(Qty_Order)"Total Qty Ordered" from sales_order_details
group by prod_no having prod_no not in ('p001','p003');

PROD_NO   Total Qty Ordered
--------  -----------------
p004                     35
p002                     15

SQL> select *from masteritem;

    ITEMNO ITEMNAME        QTY_ON_HAND
---------- --------------- -----------
         1 television             9000
         2 wmachine               6000
         3 monitor                2000
         4 dvdplayer              4000

SQL> select *from tranitem;
```

```
    ITEMNO    QTY_SOLD
---------- ----------
         1        900
         2        400
         1        200
         3        300
         1        300

SQL> select qty_sold from tranitem where itemno=(select itemno from masteritem
where itemname='wmachine');

  QTY_SOLD
----------
       400

SQL> select qty_sold from tranitem where itemno=(select itemno from masteritem
where itemname='television');

  QTY_SOLD
----------
       900
       200
       300

SQL> select itemno, qty_sold from tranitem where itemno in (select itemno from
masteritem where itemname in 'wmachine','television'));
select itemno, qty_sold from tranitem where itemno in (select itemno from
masteritem where itemname in 'wmachine','television'))
                                *
ERROR at line 1:
ORA-00907: missing right parenthesis


SQL> select itemno, qty_sold from tranitem where itemno in (select itemno from
masteritem where itemname in ('wmachine','television'));

    ITEMNO    QTY_SOLD
---------- ----------
         1        300
         1        200
         1        900
         2        400

SQL> select itemno, qty_sold from transitem where (itemno,qty_sold) in(select
itemno, max(qty_sold) from group by itemno);
select itemno, qty_sold from transitem where (itemno,qty_sold) in(select itemno,
max(qty_sold) from group by itemno)
                 *
```

```
ERROR at line 1:
ORA-00920: invalid relational operator


SQL> select itemno, qty_sold from tranitem where (itemno,qty_sold) in(select
itemno, max(qty_sold) from group by itemno);
select itemno, qty_sold from tranitem where (itemno,qty_sold) in(select itemno,
max(qty_sold) from group by itemno)

              *
ERROR at line 1:
ORA-00920: invalid relational operator


SQL> select itemno, qty_sold from tranitem where (itemno,qty_sold) in(select
itemno, max(qty_sold) from tranitem group by itemno);

    ITEMNO    QTY_SOLD
---------- ----------
         1         900
         2         400
         3         300

SQL> ttitle left 'page no:' format 99 sql.pno center 'PRODUCTWISE SALES' Skip 4 ;
SQL> set server output on;
SP2-0158: unknown SET option "server"
SQL> set serveroutput on;
SQL> ttitle left 'page no:' format 99 sql.pno center 'PRODUCTWISE SALES' Skip 4 ;
SQL> start D:\oracletest\test.lst;
SQL> /
more----
page no:  1                      PRODUCTWISE SALES



    ITEMNO    QTY_SOLD
---------- ----------
         1         900
         2         400
         3         300

SQL> /
more----
page no:  1                      PRODUCTWISE SALES



    ITEMNO    QTY_SOLD
---------- ----------
         1         900
```

```
         2        400
         3        300

SQL> /
more----
page no:  1                       PRODUCTWISE SALES


    ITEMNO    QTY_SOLD
---------- ----------
         1        900
         2        400
         3        300

SQL> spool off;
```