

PL*SQL

Exercise 9

Create the following 3 tables and insert sample data as shown:-

Ord_mst

<u>Ord_no</u>	<u>Cust_cd</u>	<u>Status</u>
1	C1	P

Ord_dtl

<u>Ord_no</u>	<u>Prod_cd</u>	<u>Qty</u>
1	P1	100
1	P2	200

Prod_mst

<u>Prod_cd</u>	<u>Prod_name</u>	<u>Qty in stock</u>	<u>Booked_qty</u>
P1	Floppies	10000	1000
P2	Printers	5000	600
P3	Modems	3000	200

1. Write a Before Insert trigger on Ord_dtl. Anytime a row is inserted in Ord_dtl, the Booked_qty in Prod_mst should be increased accordingly.

```
create or replace trigger trg
before
insert
on
ord_dtl for each row
begin
update prod_mst set booked_qty=booked_qty+:NEW.qty where
prod_cd=:NEW.prod_cd;
end;
```

2. Write a Before Delete trigger on Ord_dtl. Anytime a row is deleted from Ord_dtl, the Booked_qty in Prod_mst should be decreased accordingly.

```
create or replace trigger trg
before
delete
on
ord_dtl for each row
begin
```

```

update      prod_mst      set      booked_qty=booked_qty-:OLD.qty      where
prod_cd=:OLD.prod_cd;
end;

```

3. Write a Before Update of Prod_cd, Qty trigger on Ord_dtl. Anytime the Prod_cd or Qty is updated, the Booked_qty in Prod_mst should be increased/decreased accordingly.

4. Write a Before Update of Status trigger on Ord_mst. If the Status is updated from P (Pending) to D (Delivered), the Booked_qty and Qty_in_stock from Prod_mst should be decreased accordingly. If the Status is updated from P (Pending) to C (Cancelled), the details of the order should be deleted from Ord_dtl and corresponding Booked_qty from Prod_mst should be decreased accordingly. (The Before delete trigger on Ord_dtl would automatically decrease the Booked_qty from Prod_mst).

```

create or replace trigger trg4
before
update
on ord_mst
for each row
declare
var number(10);
begin
select qty into var from ord_dtl where ord_no=:NEW.ord_no;
if :OLD.status='P' AND :NEW.status='D' then
update prod_mst set qty_in_stock=qty_in_stock - var,booked_qty=booked_qty - var where
prod_cd=(select prod_cd from ord_dtl where ord_no=:NEW.ord_no);
elsif :OLD.status='P' AND :NEW.status='C' then
update prod_mst set qty_in_stock=qty_in_stock - var,booked_qty=booked_qty - var where
prod_cd=(select prod_cd from ord_dtl where ord_no=:NEW.ord_no);
delete ord_dtl where ord_no=:NEW.ord_no;
end if;
end;

```