

Question -3

/*By submitting this assignment for grading, I state or affirm that the work submitted is my own work and I did not in any way receive assistance nor provide assistance from another student (or external agent). I am aware and accept the consequences of unauthorized collaboration including a failing grade for both the homework and the course.

Febin Varghese*/

```
create or replace TRIGGER TRG_INVENTORYREPORT
  AFTER INSERT or update
  ON SALESORDERDETAIL
  FOR EACH ROW
  DECLARE
    v_begininvlevel inventoryreport.beginninginventorylevel%type;
    v_endinginvlevel inventoryreport.endinginventorylevel%type;
    v_desiredinvlevel RAWMATERIALS.INVENTORYLEVEL%type;
    v_reportdate salesorders.duedate%type;
    v_rmid FINISHEDGOODS.rmid%type;
    v_rawmatneeded FINISHEDGOODS.rmquantity%type;
    counter number;
    counter_1 number;
    v_ordersameday inventoryreport.ordersameday%type;
    v_ordernextday inventoryreport.ordernextday%type;
  BEGIN
    select duedate into v_reportdate from salesorders where
    sono=:new.sono ;
    select rmid into v_rmid from FINISHEDGOODS where itemid=:new.itemid;
    select count(*) into counter from inventoryreport where
    itemid=v_rmid;

    IF counter=0 then
      select inventorylevel into v_begininvlevel from rawmaterials where
      itemid=v_rmid;
    else
      select ENDINGINVENTORYLEVEL into v_begininvlevel from
      (select ENDINGINVENTORYLEVEL from inventoryreport where
      reportdate<v_reportdate and itemid=v_rmid
      order by reportdate desc) where rownum=1;
    end if;

    select rmquantity*:new.soquantity into v_rawmatneeded from
    FINISHEDGOODS where itemid=:new.itemid;

    select inventorylevel into v_desiredinvlevel from rawmaterials where
    itemid=v_rmid;
    if v_rawmatneeded <= v_begininvlevel then
      v_ordersameday:=0;
      v_ordernextday:=v_desiredinvlevel-(v_begininvlevel+v_ordersameday-
      v_rawmatneeded);
      v_endinginvlevel:=v_begininvlevel+v_ordersameday+v_ordernextday-
```

```

v_rawmatneeded;
else
v_ordersameday:=v_rawmatneeded-v_begininvlevel;
v_ordernextday:=v_desiredinvlevel;
v_endinginvlevel:=v_begininvlevel+v_ordersameday+v_ordernextday-
v_rawmatneeded;
end if;

select count(*) into counter_1 from inventoryreport where
itemid=v_rmid and reportdate=v_reportdate;

if counter_1=0 then
insert into inventoryreport
values(v_rmid,v_reportdate,v_begininvlevel,v_rawmatneeded,v_ordernex
tday,v_ordersameday,v_endinginvlevel);
else
update inventoryreport set
consumptionquantity=v_rawmatneeded,endinginventorylevel=v_endinginvl
evel,ordersameday=v_ordersameday,
ordernextday=v_ordernextday
where itemid=v_rmid and reportdate=v_reportdate ;
end if;

END TRG_INVENTORYREPORT;
/

```