**TRIGGERS**

1. for calculating age of user from date of birth:

create trigger calc\_age\_user

before insert or update of dob,age on user\_info

for each row

begin

:new.age:=trunc(months\_between(sysdate,:new.dob)/12);

end;

/

1. to update the number of seats when booking a seat:

create trigger update\_seats

before insert or update of type\_of\_seat on ticket

for each row

begin

declare

n number;

begin

if :new.type\_of\_seat=1 then

select no\_A1 into n from train where :new.train\_no=train\_no;

if n>0 then

update train

set no\_A1=no\_A1-1,no\_B1=no\_B1+1

where train\_no=:new.train\_no;

:new.status:='B';

elsif n=0 then

update train

set no\_W1=no\_W1+1

where train\_no=:new.train\_no;

:new.status:='W';

end if;

elsif :new.type\_of\_seat=2 then

select no\_A2 into n from train where :new.train\_no=train\_no;

if n>0 then

update train

set no\_A2=no\_A2-1,no\_B2=no\_B2+1

where train\_no=:new.train\_no;

:new.status:='B';

elsif n=0 then

update train

set no\_W2=no\_W2+1

where train\_no=:new.train\_no;

:new.status:='W';

end if;

elsif :new.type\_of\_seat=3 then

select no\_A3 into n from train where :new.train\_no=train\_no;

if n>0 then

update train

set no\_A3=no\_A3-1,no\_B3=no\_B3+1

where train\_no=:new.train\_no;

:new.status:='B';

elsif n=0 then

update train

set no\_W3=no\_W3+1

where train\_no=:new.train\_no;

:new.status:='W';

end if;

end if;

end;

exception

when no\_data\_found then

null;

end;

1. to update number of seats when cancelling a ticket:

create trigger del\_seat

before delete on ticket

for each row

begin

declare

n number;

begin

if :old.type\_of\_seat=1 then

if upper(:old.status)='B' then

update train

set no\_A1=no\_A1+1,no\_B1=no\_B1-1

where train\_no=:old.train\_no;

elsif upper(:old.status)='W' then

update train

set no\_W1=no\_W1-1

where train\_no=:old.train\_no;

select min(pnr\_no) into n from ticket where upper(status)='W';

update ticket

set status='B'

where pnr\_no=n;

end if;

elsif :old.type\_of\_seat=2 then

if upper(:old.status)='B' then

update train

set no\_A2=no\_A2+1,no\_B2=no\_B2-1

where train\_no=:old.train\_no;

elsif upper(:old.status)='W' then

update train

set no\_W2=no\_W2-1

where train\_no=:old.train\_no;

select min(pnr\_no) into n from ticket where upper(status)='W';

update ticket

set status='B'

where pnr\_no=n;

end if;

elsif :old.type\_of\_seat=3 then

if upper(:old.status)='B' then

update train

set no\_A3=no\_A3+1,no\_B3=no\_B3-1

where train\_no=:old.train\_no;

elsif upper(:old.status)='W' then

update train

set no\_W3=no\_W3-1

where train\_no=:old.train\_no;

select min(pnr\_no) into n from ticket where upper(status)='W';

update ticket

set status='B'

where pnr\_no=n;

end if;

end if;

end;

end;

/

1. to validate the mail id of user:

create trigger validate\_mail\_id

before insert or update on user\_info

for each row

begin

if :new.mail\_id not like '%@%.\_\_\_' then

raise\_application\_error(-20005,'Invalid Mail Id');

end if;

end;

/