**1.Write a update, delete trigger on clientmstr table. The System should keep track of the records
that ARE BEING updated or deleted. The old value of updated or deleted records should be added
in audit_trade table. (separate implementation using both row and statement triggers)**

- **Row trigger**

```
create or replace trigger t_row after update or delete on clientmstr for each row
   begin
        if updating or deleting then
          insert into audit_trade(id, name, location) values (:old.id, :old.name, :old.location);
          end if;
   end;
   /
Trigger created.
```

update clientmstr set location ='mumbai' where id=112;

1 row updated.

select * from audit_trade;

ID	NAME	LOCATION
112	Poonam	Sangli

- **Statement trigger**

```
create or replace trigger t_smt4 after update or delete on clientmstr for each row
   declare
          old_id clientmstr.id%TYPE;
          old_name clientmstr.name%TYPE;
          old_location clientmstr.location%TYPE;
   begin
          if deleting then
          old_id := :old.id;
          old_name := :old.name;
         old_location := :old.location;
          else
          old_id := :old.id;
          old_name := :old.name;
         old_location := :old.location;
         end if;
         insert into audit_trade(id,name,location) values(old_id, old_name, old_location);
   end;
   /
Trigger created.
```

delete from clientmstr where id=113;

1 row deleted.

2.Write a before trigger for Insert, update event considering following requirement: Emp(e_no, e_name, salary)

```
create or replace trigger t11 before insert or update on emp for each row
  declare
          new_salary emp.salary%TYPE;
  begin
          if inserting then
                if :new.salary < 50000 then
                      insert into tracking(e_no, salary) values (:new.e_no, :new.salary);
                end if;
          end if;
        if updating then
              If :new.salary < 50000 then
                      raise_application_error(-20002,'salary cannot be updated to less then rs.
50000');
                end if;
        end if;
  end;
  /
```

Trigger created.


```
update emp set salary = 20000 where e_no = 113;
update emp set salary = 20000 where e_no = 113
     *
ERROR at line 1:
ORA-20002: salary cannot be updated to less then rs. 50000
```

insert into emp values(117,'sneha',40000);

1 row created.
 select * from tracking;

```
    E_NO    SALARY
---------- ----------
     117     40000
```


3. Write a Database trigger for following requirements:
Employee salary of last three month is stored in the emp_sal table.

emp_sal(emp_no, sal1,sal2,sal3)
before inserting salary into emp_sal table, if salary of employee in any of the last three month is
greater than Rs. 50,000/- then entry of average salary along with emp_no needs to be inserted into
new table emp_new(emp_no, avg_sal).

```
create or replace trigger t12 before insert on emp_sal for each row
    declare
            avg_salary int;
    begin
            avg_salary := (:new.sal1 + :new.sal2 + :new.sal3)/3;
            if :new.sal1>50000 or :new.sal2 > 50000 or :new.sal3> 50000 then
                    insert into emp_new(emp_no, avg_sal) values (:new.emp_no, avg_salary);
            end if;
    end;
  /
```

Trigger created.

 insert into emp_sal values(118,60000,40000,50000);

1 row created.

SQL> select * from emp_new;

```
   EMP_NO    AVG_SAL
---------- ----------
      118     50000
```