

Q. Database trigger (all types: row level and statement level triggers , before and after triggers). Write a database trigger on student table. The system should keep a track of records that are being updated or deleted. The old value of updated or deleted records should be added in Alumni table.

Student(Roll no, Name, DateOfAdmission, Branch, Percent, Status)

ROW LEVEL TRIGGER BEFORE UPDATE

```
create or replace trigger trigger1 before update on student
  for each row
  begin
    insert into alumni values(:old.rollno, :old.name, :old.doa, :old.branch, :old.percent,
:old.status);
    dbms_output.put_line('trigger executed');
  end;
/
```

ROW LEVEL TRIGGER AFTER UPDATE

```
create or replace trigger trigger2 after update on student
  for each row
  begin
    insert into alumni values(:new.rollno, :new.name, :new.doa, :new.branch,
:new.percent, :new.status)
    dbms_output.put_line('trigger executed');
  end;
/
```

ROW LEVEL TRIGGER BEFORE DELETE

```
create or replace trigger trigger3 before delete on student
  for each row
  begin
    insert into alumni values(:old.rollno, :old.name, :old.doa, :old.branch, :old.percent,
:old.status);
    dbms_output.put_line('trigger executed');
  end;
/
```

ROW LEVEL TRIGGER AFTER DELETE

```
create or replace trigger trigger8 after delete on student
  --for each row
  begin
    --insert into alumni values(:new.rollno, :new.name, :new.doa, :new.branch, :new.percent,
:new.status);
    dbms_output.put_line('trigger executed');
  end;
/
```

STATEMENT LEVEL TRIGGER BEFORE UPDATE

```
create or replace trigger trigger5 before update on student
```

```
begin
    insert into alumni values(999, 'TRIGGER', '15/JAN/19', 'TRIGGER', 100, 'X');
    dbms_output.put_line('trigger executed');
end;
/
```

STATEMENT LEVEL TRIGGER AFTER UPDATE

create or replace trigger trigger6 after update on student

```
begin
    insert into alumni values(999, 'TRIGGER', '15/JAN/19', 'TRIGGER', 100, 'X');
    dbms_output.put_line('trigger executed');
end;
/
```

STATEMENT LEVEL TRIGGER BEFORE DELETE

create or replace trigger trigger7 before delete on student

```
begin
    insert into alumni values(999, 'TRIGGER', '15/JAN/19', 'TRIGGER', 100, 'X');
    dbms_output.put_line('trigger executed');
end;
/
```

STATEMENT LEVEL TRIGGER AFTER DELETE

create or replace trigger trigger8 after delete on student

```
begin
    insert into alumni values(999, 'TRIGGER', '15/JAN/19', 'TRIGGER', 100, 'X');
    dbms_output.put_line('trigger executed');
end;
/
```