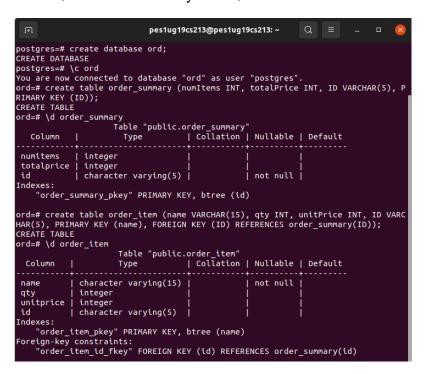
DBMS Lab 10 - Triggers and Functions

KARTIKA NAIR
PESIUG19CS213
09TH NOVEMBER 2021

1. Triggers for order item and order summary tables

Creation of database, order_summary table, and order_item table



Creation of increment and decrement functions and triggers

```
Q =
                                      pes1ug19cs213@pes1ug19cs213: ~
ord=# create function inc_213() returns trigger as $$
update order_summary set totalPrice = totalPrice + (NEW.qty * NEW.unitPrice)
where order_summary.ID = NEW.ID;
update order_summary set numItems = numItems + 1
 where order_summary.ID = NEW.ID;
 return NEW:
end;
$$ LANGUAGE plpgsql;
CREATE FUNCTION
ord=# create trigger increment_213
after insert on order_item
for each row
execute procedure inc_213();
CREATE TRIGGER
ord=# create function dec_213() returns trigger as $$
begin
update order_summary set totalPrice = totalPrice - (OLD.qty * OLD.unitPrice)
where order_summary.ID = OLD.ID;
update order_summary set numItems = numItems + 1
where order_summary.ID = OLD.ID;
return OLD;
end;
$$ LANGUAGE plpgsql;
CREATE FUNCTION
ord=# create trigger decrement_213
after delete on order_item
for each row
 execute procedure dec_213();
CREATE TRIGGER
```

Insertion of values into tables, displaying incremented values

```
Q =
                                                    pes1ug19cs213@pes1ug19cs213: ~
ord=# INSERT into order_summary values (0, 0, '12345');
INSERT into order_summary values (0, 0, '21345');
INSERT into order_summary values (0, 0, '31245');
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT into order_item values ('Hyde', 1, 2, '12345');
INSERT into order_item values ('Jekyll', 2, 1, '12345');
INSERT into order_item values ('Enfield', 3, 4, '21345');
INSERT into order_item values ('Utterson', 5, 3, '31245');
INSERT 0 1
INSERT 0 1
INSERT 0 1
INSERT 0 1
ord=# select * from order_summary;
  numitems | totalprice | id
                                    4 | 12345
12 | 21345
15 | 31245
               2
               1 |
               1 |
(3 rows)
```

Displaying decremented values