

Lab 03: SQL INSERT-UPDATE-DELETE

--Add column in customer table

```
alter table customer add city varchar(20);  
alter table customer add state varchar(20);
```

--Add column in items table

```
alter table items add reorderlevel integer;  
alter table items add averagepurchaseprice integer;
```

1. Add 5 customers

```
insert into customer values(101,'Peril',380054,'peritalaviya123@gmail.com','Surat','Gujarat');  
insert into customer values(102,'Aryan',380005,'aryanshah576@gmail.com','Ahmedabad','Gujarat');  
insert into customer  
values(103,'Devesh',380015,'deveshsheth@gmail.com','Mumbai','Maharashtra');  
insert into customer  
values(104,'Dhagash',380045,'dhagashshah@gmail.com','Bangalore','Karnataka');  
insert into customer values(105,'Karina',380035,'karina@gmail.com','Amreli','Gujarat');
```

2. Add 10 items

```
insert into items values(11101,'Milk',1,27,100,10,25);  
insert into items values(11102,'Pencil',2,10,25,10,12);  
insert into items values(11103,'Panner',1,15,20,5,10);  
insert into items values(11104,'Notebook',2,35,50,15,30);  
insert into items values(11105,'Lassi',1,20,32,8,13);
```

```
insert into items values(11106,'Headphones',3,1500,22,4,1200);
insert into items values(11107,'Mobile',3,5000,10,2,4200);
insert into items values(11108,'Ice-cream',1,15,15,6,9);
insert into items values(11109,'TV',3,20000,5,1,18000);
insert into items values(11110,'Pen',2,22,32,8,13);
```

3. Add 5 invoices

```
insert into invoice values(101,'2020-11-28',102);
insert into invoice values(102,'2019-12-11',103);
insert into invoice values(103,'2011-01-17',102);
insert into invoice values(104,'2021-04-08',101);
insert into invoice values(105,'2020-12-25',104);
```

4. Add 2-4 items in all invoicedetails

```
insert into invoicedetails values(101,11101,2,54);
insert into invoicedetails values(103,11108,4,60);
insert into invoicedetails values(102,11102,10,100);
insert into invoicedetails values(105,11110,3,66);
```

5. Update price of given item

```
update items set salesprice = 16.50 where item_code = 11103;
```

Before:

Data Output		Explain	Messages	Notifications			
<div><div></div></div>	<div>item_code</div> <div>[PK] integer</div>	<div><div></div></div> <div>item_name</div> <div>character varying (20)</div>	<div><div></div></div> <div>category_id</div> <div>integer</div>	<div><div></div></div> <div>saleprice</div> <div>numeric (9,2)</div>	<div><div></div></div> <div>qty_in_stock</div> <div>smallint</div>	<div><div></div></div> <div>reorderlevel</div> <div>integer</div>	<div><div></div></div> <div>averagepurchaseprice</div> <div>integer</div>
1	11103	Panner	1	16.50	20	5	10
2	11105	Lassi	1	22.00	32	8	13
3	11106	Headphones	3	1650.00	22	4	1200
4	11107	Mobile	3	5500.00	10	2	4200
5	11108	Ice-cream	1	16.50	15	6	9
6	11109	TV	3	22000.00	5	1	18000
7	11102	Pencil	2	11.55	25	10	12
8	11104	Notebook	2	40.43	50	15	30
9	11110	Pen	2	25.41	32	8	13

After:

	item_code [PK] integer	item_name character varying (20)	category_id integer	saleprice numeric (9,2)	qty_in_stock smallint	reorderlevel integer	averagepurchaseprice integer
2	11106	Headphones	3	1650.00	22	4	1200
3	11107	Mobile	3	5500.00	10	2	4200
4	11108	Ice-cream	1	16.50	15	6	9
5	11109	TV	3	22000.00	5	1	18000
6	11102	Pencil	2	11.55	25	10	12
7	11104	Notebook	2	40.43	50	15	30
8	11110	Pen	2	25.41	32	8	13
9	11103	Panner	1	17.00	20	5	10

6. Give 10% increment to all items.

```
select *,i.saleprice*1.1 as IncrementPrice from items i;
```

	item_code [PK] integer	item_name character varying (20)	category_id integer	saleprice numeric (9,2)	qty_in_stock smallint	reorderlevel integer	averagepurchaseprice integer	incrementprice numeric
1	11105	Lassi	1	22.00	32	8	13	24.200
2	11106	Headphones	3	1650.00	22	4	1200	1815.000
3	11107	Mobile	3	5500.00	10	2	4200	6050.000
4	11108	Ice-cream	1	16.50	15	6	9	18.150
5	11109	TV	3	22000.00	5	1	18000	24200.000
6	11102	Pencil	2	11.55	25	10	12	12.705
7	11104	Notebook	2	40.43	50	15	30	44.473
8	11110	Pen	2	25.41	32	8	13	27.951
9	11103	Panner	1	17.00	20	5	10	18.700

OR

update items set saleprice = saleprice + (saleprice * 10/100);

Before:

	item_code [PK] integer	item_name character varying (20)	category_id integer	saleprice numeric (9,2)	qty_in_stock smallint	reorderlevel integer	averagepurchaseprice integer
1	11105	Lassi	1	22.00	32	8	13
2	11106	Headphones	3	1650.00	22	4	1200
3	11107	Mobile	3	5500.00	10	2	4200
4	11108	Ice-cream	1	16.50	15	6	9
5	11109	TV	3	22000.00	5	1	18000
6	11102	Pencil	2	11.55	25	10	12
7	11104	Notebook	2	40.43	50	15	30
8	11110	Pen	2	25.41	32	8	13
9	11103	Panner	1	17.00	20	5	10

After:

	Item_code [PK] integer	Item_name character varying (20)	category_id integer	saleprice numeric (9,2)	qty_in_stock smallint	reorderlevel integer	averagepurchaseprice integer
1	11105	Lassi	1	24.20	32	8	13
2	11106	Headphones	3	1815.00	22	4	1200
3	11107	Mobile	3	6050.00	10	2	4200
4	11108	Ice-cream	1	18.15	15	6	9
5	11109	TV	3	24200.00	5	1	18000
6	11102	Pencil	2	12.71	25	10	12
7	11104	Notebook	2	44.47	50	15	30
8	11110	Pen	2	27.95	32	8	13
9	11103	Panner	1	18.70	20	5	10

7. Give 5% increments to all items for category = 2.

select *,i.saleprice*1.05 as IncrementPrice from items i where category_id=2;

	Item_code [PK] integer	Item_name character varying (20)	category_id integer	saleprice numeric (9,2)	qty_in_stock smallint	reorderlevel integer	averagepurchaseprice integer	Incrementprice numeric
1	11102	Pencil	2	12.71	25	10	12	13.3455
2	11104	Notebook	2	44.47	50	15	30	46.6935
3	11110	Pen	2	27.95	32	8	13	29.3475

OR

update items set saleprice = saleprice + (saleprice * 5/100) where category_id=2;

Before:

	item_code [PK] integer	item_name character varying (20)	category_id integer	saleprice numeric (9,2)	qty_in_stock smallint	reorderlevel integer	averagepurchaseprice integer
3	11107	Mobile	3	6050.00	10	2	4200
4	11108	Ice-cream	1	18.15	15	6	9
5	11109	TV	3	24200.00	5	1	18000
6	11102	Pencil	2	12.71	25	10	12
7	11104	Notebook	2	44.47	50	15	30
8	11110	Pen	2	27.95	32	8	13
9	11103	Panner	1	18.70	20	5	10
10	11101	Milk	1	29.70	100	10	25

After:

	item_code [PK] integer	item_name character varying (20)	category_id integer	saleprice numeric (9,2)	qty_in_stock smallint	reorderlevel integer	averagepurchaseprice integer
3	11107	Mobile	3	6050.00	10	2	4200
4	11108	Ice-cream	1	18.15	15	6	9
5	11109	TV	3	24200.00	5	1	18000
6	11103	Panner	1	18.70	20	5	10
7	11101	Milk	1	29.70	100	10	25
8	11102	Pencil	2	13.35	25	10	12
9	11104	Notebook	2	46.69	50	15	30
10	11110	Pen	2	29.35	32	8	13

8. Delete a given item from items item code = 11101

delete from items where item_code = 11101;

Before:

	item_code [PK] integer	item_name character varying (20)	category_id integer	saleprice numeric (9,2)	qty_in_stock smallint	reorderlevel integer	averagepurchaseprice integer
3	11107	Mobile	3	6050.00	10	2	4200
4	11108	Ice-cream	1	18.15	15	6	9
5	11109	TV	3	24200.00	5	1	18000
6	11103	Panner	1	18.70	20	5	10
7	11101	Milk	1	29.70	100	10	25
8	11102	Pencil	2	13.35	25	10	12
9	11104	Notebook	2	46.69	50	15	30
10	11110	Pen	2	29.35	32	8	13

After:

	item_code [PK] integer	item_name character varying (20)	category_id integer	saleprice numeric (9,2)	qty_in_stock smallint	reorderlevel integer	averagepurchaseprice integer
2	11106	Headphones	3	1815.00	22	4	1200
3	11107	Mobile	3	6050.00	10	2	4200
4	11108	Ice-cream	1	18.15	15	6	9
5	11109	TV	3	24200.00	5	1	18000
6	11103	Panner	1	18.70	20	5	10
7	11102	Pencil	2	13.35	25	10	12
8	11104	Notebook	2	46.69	50	15	30
9	11110	Pen	2	29.35	32	8	13

9. Delete a given customer = 101.

delete from customer where cust_id = 101;

Before:

	cust_id [PK] integer	name character varying (20)	pin integer	email character varying (50)	city character varying (20)	state character varying (20)
1	102	Aryan	380005	aryanshah576@gmail.com	Ahmedabad	Gujarat
2	103	Devesh	380015	deveshsheth@gmail.com	Mumbai	Maharashtra
3	104	Dhagash	380045	dhagashshah@gmail.com	Bangalore	Karnataka
4	105	Karina	380035	karina@gmail.com	Amreli	Gujarat
5	101	Peril	380054	periltalaviya123@gmail.com	Surat	Gujarat

	invno [PK] integer	invdate date	customerid integer
1	101	2020-11-28	102
2	103	2011-01-17	102
3	105	2020-12-25	104
4	102	2019-12-11	103
5	104	2021-04-08	101

After:

	cust_id [PK] integer	name character varying (20)	pin integer	email character varying (50)	city character varying (20)	state character varying (20)
1	102	Aryan	380005	aryanshah576@gmail.com	Ahmedabad	Gujarat
2	103	Devesh	380015	deveshsheth@gmail.com	Mumbai	Maharashtra
3	104	Dhagash	380045	dhagashshah@gmail.com	Bangalore	Karnataka
4	105	Karina	380035	karina@gmail.com	Amreli	Gujarat

	invno [PK] integer	invdate date	customerid integer
1	101	2020-11-28	102
2	103	2011-01-17	102
3	105	2020-12-25	104
4	102	2019-12-11	103

10. Delete all invoices of a given state '2019-12-11'; this should also delete all items of affected invoices.

delete from invoice where invdate = '2019-12-11';

Before:

	invno [PK] integer	invdate date	customerid integer
1	101	2020-11-28	102
2	103	2011-01-17	102
3	105	2020-12-25	104
4	102	2019-12-11	103

	invno [PK] integer	itemcode [PK] integer	qty integer	price numeric (9,2)
1	103	11108	4	60.00
2	105	11110	3	66.00
3	102	11102	10	100.00

After:

	invno [PK] integer	invdate date	customerid integer
1	101	2020-11-28	102
2	103	2011-01-17	102
3	105	2020-12-25	104

	invno [PK] integer	itemcode [PK] integer	qty integer	price numeric (9,2)
1	103	11108	4	60.00
2	105	11110	3	66.00