Multi-Table JOINs - Task 4

RDBMS used : MySql

- **Creating "orders" table**

```
create table orders(
order_id int NOT NULL AUTO_INCREMENT,
order_date date,
prod_id int,
quantity int,
order_status varchar(20),
region_id varchar(3),
PRIMARY KEY(order_id),
FOREIGN KEY(prod_id) references products(prod_id)
);
```

Field	Type	Null	Key	Default	Extra
order_id	int(11)	NO	PRI	NULL	auto_increment
order_date	date	YES		NULL	
prod_id	int(11)	YES	MUL	NULL	
quantity	int(11)	YES		NULL	
order_status	varchar(20)	YES		NULL	
region_id	varchar(3)	YES		NULL	

- **Displaying records in "orders" table**

order_id	order_date	prod_id	quantity	order_status	region_id
1	2020-04-28	1002	3	shipped	TN
2	2020-07-17	1001	4	packaged	AP
3	2021-10-08	1002	5	shipped	TN
4	2021-02-22	1003	1	shipped	KA
5	2020-01-15	1001	3	delivered	DL
NULL	NULL	NULL	NULL	NULL	NULL

- **INNER JOIN between products and orders tables**

```
select orders.order_id, products.prod_name, products.prod_id, products.price,
orders.quantity
from products INNER JOIN orders on products.prod_id=orders.prod_id;
```

order_id	prod_name	prod_id	price	quantity
1	loafers	1002	3500	3
2	sneakers	1001	2500	4
3	loafers	1002	3500	5
4	boots	1003	3000	1
5	sneakers	1001	2500	3

- **LEFT OUTER JOIN**

```
select products.prod_id, products.prod_name, products.price, orders.quantity,
orders.order_status
from products LEFT JOIN orders on products.prod_id=orders.prod_id;
```

prod_id	prod_name	price	quantity	order_status
1002	loafers	3500	3	shipped
1001	sneakers	2500	4	packaged
1002	loafers	3500	5	shipped
1003	boots	3000	1	shipped
1001	sneakers	2500	3	delivered
1004	flip-flops	500	NULL	NULL

- **RIGHT OUTER JOIN**

```
select products.prod_name, products.price, orders.quantity, orders.order_status
from orders RIGHT JOIN products on products.prod_id=orders.prod_id;
```

prod_name	price	quantity	order_status
loafers	3500	3	shipped
sneakers	2500	4	packaged
loafers	3500	5	shipped
boots	3000	1	shipped
sneakers	2500	3	delivered
flip-flops	500	NULL	NULL

- **Selecting values between a certain date**

```
select products.prod_id, products.prod_name, orders.order_date, orders.order_status,
orders.region_id
from products INNER JOIN orders on products.prod_id=orders.prod_id
where orders.order_date between "2020/01/01" and "2020/12/01";
```

prod_id	prod_name	order_date	order_status	region_id
1002	loafers	2020-04-28	shipped	TN
1001	sneakers	2020-07-17	packaged	AP
1001	sneakers	2020-01-15	delivered	DL