

Task #1

Practice DQL Commands

1. SELECT:

```
mysql> select database();
+-----+
| database() |
+-----+
| Northwind  |
+-----+
1 row in set (0.00 sec)
```

2. WHERE:

```
mysql> select * from Category where mod(categoryId,2)=0;
+-----+-----+-----+-----+
| categoryId | categoryName | description | picture |
+-----+-----+-----+-----+
| 2 | Condiments | Sweet and savory sauces, relishes, spreads, and seasonings | NULL |
| 4 | Dairy Products | Cheeses | NULL |
| 6 | Meat/Poultry | Prepared meats | NULL |
| 8 | Seafood | Seaweed and fish | NULL |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

3. ORDER BY:

```
mysql> select * from Category order by categoryId desc;
+-----+-----+-----+-----+
| categoryId | categoryName | description | picture |
+-----+-----+-----+-----+
| 8 | Seafood | Seaweed and fish | NULL |
| 7 | Produce | Dried fruit and bean curd | NULL |
| 6 | Meat/Poultry | Prepared meats | NULL |
| 5 | Grains/Cereals | Breads, crackers, pasta, and cereal | NULL |
| 4 | Dairy Products | Cheeses | NULL |
| 3 | Confections | Desserts, candies, and sweet breads | NULL |
| 2 | Condiments | Sweet and savory sauces, relishes, spreads, and seasonings | NULL |
| 1 | Beverages | Soft drinks, coffees, teas, beers, and ales | NULL |
+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

4. DISTINCT:

```
mysql> select distinct(categoryId) from Category;
+-----+
| categoryId |
+-----+
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
+-----+
8 rows in set (0.00 sec)
```

5. ISNULL() Function:

```
mysql> select ISNULL("a");
+-----+
| ISNULL("a") |
+-----+
|           0 |
+-----+
1 row in set (0.00 sec)

mysql> select ISNULL(null);
+-----+
| ISNULL(null) |
+-----+
|           1 |
+-----+
1 row in set (0.00 sec)
```

5. Column Aliases:

```
mysql> select categoryId ID, categoryName NAME, description `DESC`, picture PIC from Category;
+-----+-----+-----+-----+
| ID | NAME          | DESC                                     | PIC |
+-----+-----+-----+-----+
| 1 | Beverages     | Soft drinks, coffees, teas, beers, and ales | NULL |
| 2 | Condiments    | Sweet and savory sauces, relishes, spreads, and seasonings | NULL |
| 3 | Confections   | Desserts, candies, and sweet breads         | NULL |
| 4 | Dairy Products | Cheeses                                       | NULL |
| 5 | Grains/Cereals | Breads, crackers, pasta, and cereal         | NULL |
| 6 | Meat/Poultry  | Prepared meats                             | NULL |
| 7 | Produce       | Dried fruit and bean curd                   | NULL |
| 8 | Seafood       | Seaweed and fish                           | NULL |
+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

6. PREDICATES: A predicate is an expression that simply evaluate to be true, false, or unknown. Predicates are usually used in WHERE and HAVING clauses. Also at any other points where a boolean value needs to be generated. Common predicates are:

- Comparison
- Like
- Between AND
- IN
- EXISTS
- ISNULL()

7. BETWEEN AND:

```
mysql> select * from Category where categoryId between 3 and 5;
```

categoryId	categoryName	description	picture
3	Confections	Desserts, candies, and sweet breads	NULL
4	Dairy Products	Cheeses	NULL
5	Grains/Cereals	Breads, crackers, pasta, and cereal	NULL

3 rows in set (0.00 sec)

8. IN:

```
mysql> select * from Category where categoryName IN ('Condiments', 'Seafood');
```

categoryId	categoryName	description	picture
2	Condiments	Sweet and savory sauces, relishes, spreads, and seasonings	NULL
8	Seafood	Seaweed and fish	NULL

2 rows in set (0.00 sec)

9. LIKE:

```
mysql> select * from Category where categoryName like 'C%';
```

categoryId	categoryName	description	picture
2	Condiments	Sweet and savory sauces, relishes, spreads, and seasonings	NULL
3	Confections	Desserts, candies, and sweet breads	NULL

2 rows in set (0.00 sec)

10. Top n Clause: Top n Clause is used to get top n rows in MSSQL but in MYSQL we have LIMIT clause to limit no of output rows

```
mysql> select * from Category limit 5;
```

categoryId	categoryName	description	picture
1	Beverages	Soft drinks, coffees, teas, beers, and ales	NULL
2	Condiments	Sweet and savory sauces, relishes, spreads, and seasonings	NULL
3	Confections	Desserts, candies, and sweet breads	NULL
4	Dairy Products	Cheeses	NULL
5	Grains/Cereals	Breads, crackers, pasta, and cereal	NULL

5 rows in set (0.00 sec)

11. Set Operators: Set operators are used to join results of two or more SELECT statements.

12. Union: It shows records from both selects and removes duplicate from the result.

```
select * from CustomerChina UNION select * from CustomerPak;
```

13. Union All: It shows records from both selects and contains duplicates from both results.

```
select * from CustomerChina UNION ALL select * from CustomerPak;
```

14. Intersect: It shows common records from both selects.

```
select * from CustomerChina INTERSECT select * from CustomerPak;
```

15. Except: It shows records from first select which are not in the second select.

```
select * from CustomerPak EXCEPT select * from CustomerChina;
```