

## Database Design Project

### Oracle Baseball League Store Database

#### Project Scenario:

You are a small consulting company specializing in database development. You have just been awarded the contract to develop a data model for a database application system for a small retail store called Oracle Baseball League (OBL).

The Oracle Baseball League store serves the entire surrounding community selling baseball kit. The OBL has two types of customer, there are individuals who purchase items like balls, cleats, gloves, shirts, screen printed t-shirts, and shorts. Additionally customers can represent a team when they purchase uniforms and equipment on behalf of the team.

Teams and individual customers are free to purchase any item from the inventory list, but teams get a discount on the list price depending on the number of players. When a customer places an order we record the order items for that order in our database.

OBL has a team of three sales representatives that officially only call on teams but have been known to handle individual customer complaints.

## Section 6 Lesson 7 Exercise 2: Restricting Data Using WHERE

### Limit rows using WHERE (S6L7 Objective 1)

In this exercise you will refine the data that is returned in your query by adding a WHERE clause to your SELECT statement.

#### Part 1: Using the NULL Conditions

1. Write a query that will display information for teams that don't receive a discount in the following format:

The Rovers team has 25 players and does not receive a discount.

Use **Team Information** as the column alias.

The screenshot shows a database query builder interface. At the top, there are two tabs: 'Worksheet' and 'Query Builder'. The 'Query Builder' tab is active, displaying a SQL query in a text area:

```
SELECT * FROM TEAMS  
WHERE TEAMS.DISCOUNT IS NULL;
```

Below the query area, there is a 'Query Result' window. It shows the results of the query in a table format. The table has four columns: ID, NAME, NUMBER\_OF\_PLAYERS, and DISCOUNT. The results are as follows:

ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT
1 t003	Rovers	25	(null)

2. Write a query that will display information for only teams that receive a discount in the following format:

The Rockets team has 25 players and receives a discount of 10 percent.





Use **Team Information** as the column alias.

Worksheet

Query builder

```
SELECT* FROM TEAMS
WHERE TEAMS.DISCOUNT IS NOT NULL;
```

Query Result x

 SQL | All Rows Fetched: 3 in 0.133 seconds




ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT
1 t001	Rockets	25	10
2 t002	Celtics	42	20
3 t004	Jets	10	5

## Part 2: Logical Operators: AND

- Write a query that will display the customer number, address line 1 and postal code for customers that live in the starford area of Liverpool. Use Customer Number, Street Address and Postal Code as the column aliases.

```
SELECT ctr_number AS "Customer Number", ADDRESS_LINE_1 AS "Street Address", ZIP_CODE AS "Postal Code"
FROM customers_addresses
WHERE ADDRESS_LINE_2 = 'Starford'
AND CITY = 'Liverpool';
```

Query Result x

 SQL | All Rows Fetched: 1 in 0.329 seconds

Customer Number	Street Address	Postal Code
1 c00001	17 Gartsquare Road	LP89JHK

### Part 3: Logical Operators: OR

1. Write a query that will display the customer number, address line 1 and postal code for customers that live in either starford or Liverpool in general. Use Customer Number, Street Address and Postal Code as the column aliases.

```
SELECT ctr_number AS "Customer Number", ADDRESS_LINE_1 AS "Street Address", ZIP_CODE AS "Postal Code"
FROM customers_addresses
WHERE ADDRESS_LINE_2 = 'Starford'
OR CITY = 'Liverpool';
```

Query Result x

SQL | All Rows Fetched: 2 in 0.2 seconds



	Customer Number	Street Address	Postal Code
1	c00001	17 Gartsquare Road	LP89JHK
2	c00001	63 Acacia Drive	LP83JHR

### Part 4: Logical Operators: NOT Equal To

1. Write a query that will display the customer number, address line 1 and postal code for customers that do not live in Liverpool. Use Customer Number, Street Address and Postal Code as the column aliases.

```
SELECT ctr_number AS "Customer Number", ADDRESS_LINE_1 AS "Street Address", ZIP_CODE AS "Postal Code"  
FROM customers_addresses  
WHERE CITY != 'Liverpool';
```

Query Result x

  SQL | All Rows Fetched: 2 in 0.019 seconds

	Customer Number	Street Address	Postal...	
1	c00101	54 Ropehill Crescent	ST45AGV	
2	c01986	36 Watercress Lane	JP23YTH	