

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 8 Exercise 2: Sorting Data Using ORDER BY

Part 1 : TOP-N-ANALYSIS (S6L8 Objective 3)

1. The customers are numbered sequentially with each new customer being assigned a higher customer number. Use TOP-N-ANALYSIS to only show the First and last name of the first three customers. Show the customers first and last name in the same column using Customer Name as the column alias.

Code:

```
SELECT
    first_name AS "First Name",
    last_name AS "Last Name"
FROM
    customers
ORDER BY
    ctr_number
FETCH FIRST 3 ROWS ONLY;
```

Output:

The screenshot shows a database query builder interface with two tabs: "Worksheet" and "Query Builder". The "Query Builder" tab is active, displaying two SQL queries. The first query is a SELECT statement that filters items by name. The second query is a SELECT statement that filters customers by commission rate. Below the queries, there are two tabs: "Script Output" and "Query Result". The "Query Result" tab is active, showing the results of the second query. The results are displayed in a table with two columns: "First Name" and "Last Name".

```
itm_number AS ItemNumber,  
name AS ItemName  
FROM  
items  
WHERE  
name LIKE '%o%';  
  
SELECT  
first_name AS "First Name",  
last_name AS "Last Name"  
FROM  
customers  
ORDER BY  
ctr_number  
FETCH FIRST 3 ROWS ONLY;
```

Task completed in 0.286 seconds

im01101047 game top

ITEMNUMBER	ITEMNAME
im01101044	gloves
im01101046	socks
im01101047	game top

First Name	Last Name
Robert	Thornberry
Jennifer	Jones
John	Doe

Part 2 : Using a Substitution Variable (S6L8 Objective 4)

1. Use a substitution variable that will allow you to enter the commission rate for the sales representatives. The first and last names should be displayed to screen for any sales representatives that earn that commission rate and the output should be ordered by their last name. Use an appropriate alias for your column headings.

Code:

```
ACCEPT commission_rate NUMBER PROMPT 'Enter Commission Rate: ';
```

```
SELECT  
first_name AS "First Name",  
last_name AS "Last Name",  
commission_rate AS "Commission Rate"  
FROM  
sales_representatives  
WHERE  
commission_rate = &commission_rate  
ORDER BY  
last_name;
```

Output:
Commision rate :5

The screenshot shows the SQL Developer interface with a query in the Query Builder. The query is as follows:

```
ACCEPT commission_rate NUMBER PROMPT 'Enter Commission Rate: ';

SELECT
    first_name AS "First Name",
    last_name AS "Last Name",
    commission_rate AS "Commission Rate"
FROM
    sales_representatives
WHERE
    commission_rate = &commission_rate
ORDER BY
    last_name;
```

The Script Output pane shows the execution of the query, indicating it completed in 4.541 seconds. The Query Result pane displays the following data:

First Name	Last Name	Commission Rate
Barry	Speed	5
Victoria	Wright	5

Commision rate=10

The screenshot shows the SQL Developer interface with the same query as above, but with the commission rate set to 10. The query is:

```
ACCEPT commission_rate NUMBER PROMPT 'Enter Commission Rate: ';

SELECT
    first_name AS "First Name",
    last_name AS "Last Name",
    commission_rate AS "Commission Rate"
FROM
    sales_representatives
WHERE
    commission_rate = &commission_rate
ORDER BY
    last_name;
```

The Script Output pane shows the execution completed in 2.208 seconds. The Query Result pane displays the following data:

First Name	Last Name	Commission Rate
Charles	Raymond	10