

## 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 6 Exercise 2: Retrieving Data Using SELECT

### Write and Execute SELECT statements (S6L6 Objective 2)

In this exercise you will retrieve data that is stored in the database system by using a SELECT statement.

#### Part 1: Using Arithmetic Operators

1. Every customer has been told they can pay off their current balance over a 12 month period. Display the customer's first name, last name, current balance and monthly payment.
2. Obl is considering giving a gift card to all its customers of 5.00 that can be used to reduce their current balance. Write a query that will show the customers first name, last name, customer number, current balance and the value of their balance minus the gift value.
3. What would be the problem with implementing this scheme?

#### Part 2 : Using Column Aliases

1. You previously wrote a query that display the customer's first name, last name, current balance and monthly payment. Rewrite the query to use First Name, Last Name, Balance and Monthly Repayments as the column aliases. The aliases are to be shown exactly as described (case sensitive).

#### Part 3: Using Literal Character Strings

1. Write a query that will display the team information in the following format:  
The Rockets team has 25 players and receives a discount of 10 percent.  
Use **Team Information** as the column alias.

2. Why does the last team not show a discount?

## PART 1

① `SELECT FIRST_NAME, LAST_NAME, CURRENT_BALANCE, CURRENT_BALANCE/12`  
`FROM CUSTOMERS;`

	FIRST_NAME	LAST_NAME	CURRENT_BALANCE	CURRENT_BALANCE/12
1	Robert	Thornberry	150	12.5
2	Jennifer	Jones	0	0
3	John	Doe	987.5	82.291666666666666666666666666667
4	Andrew	Murcia	85	7.08333333333333333333333333333333
5	Maria	Galant	125.65	10.47083333333333333333333333333333
6	Brian	Rogers	50	4.16666666666666666666666666666667

② `SELECT FIRST_NAME, LAST_NAME, CTR_NUMBER, CURRENT_BALANCE, CURRENT_BALANCE-5.00`  
`FROM CUSTOMERS;`

	FIRST_NAME	LAST_NAME	CTR_NUMBER	CURRENT_BALANCE	CURRENT_BALANCE-5.00
1	Robert	Thornberry	c00001	150	145
2	Jennifer	Jones	c00012	0	-5
3	John	Doe	c00101	987.5	982.5
4	Andrew	Murcia	c00103	85	80
5	Maria	Galant	c01986	125.65	120.65
6	Brian	Rogers	c02001	50	45

③ The potential problem with implementing the gift card scheme is that it might lead to a loss of revenue for the business. If all customers receive a £5.00 gift card that directly reduces their current balance, the company could experience a financial shortfall.

## PART 2

```
① SELECT FIRST_NAME "First Name", LAST_NAME "Last Name", CURRENT_BALANCE "Balance",  
CURRENT_BALANCE / 12 "Monthly Repayments"  
FROM CUSTOMERS;
```

[illegible]

## PART 3

① SELECT 'The' || NAME || ' team has ' || NUMBER\_OF\_PLAYERS || ' players and receive a discount of ' || DISCOUNT || ' percent.'

As "Team Information"

FROM TEAMS;

Team Information	
1	The Rockets team has 25 players and receives a discount of 10 percent.
2	The Celtics team has 42 players and receives a discount of 20 percent.
3	The Rovers team has 8 players and receives a discount of percent.
4	The Jets team has 10 players and receives a discount of 5 percent.

② The corresponding 'discount\_percent' value for that team in the 'teams' table is NULL or 0.