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B23CS0065

SECD2523 - 02

SQL 3

PART 1

Part 1:

1. SELECT * FROM customers;
2. SELECT * FROM teams;
3. SELECT * FROM items;

Part 2:

1. SELECT ctr_number, first_name, last_name, email,
phone_number
FROM customers;
2. SELECT name, number_of_players
FROM teams;
3. SELECT name, description, category
FROM items;

PART 2

Part 1: Using Arithmetic Operators

1. `SELECT first_name, last_name, current_balance,
current_balance / 12 AS monthly_payment
FROM customers;`
2. `SELECT first_name, last_name, ctr_number,
current_balance, (current_balance - 5.00) AS
balance_after_gift
FROM customers;`
3. The problem with implementing this scheme is that it doesn't take into account the possibility of a negative balance less than \$5.00, applying the gift card would result in a negative balance. Negative balances may not be acceptable or practical in a financial system, and it could lead to issues with accounting, reporting, and customer relations. It's important to maintain the integrity of financial transactions.

Part 2: Using Column Aliases

1. `SELECT
first_name AS "First Name",
last_name AS "Last Name",
current_balance AS "Balance",
NVL(current_balance / 12, 0) AS "Monthly Repayments"
FROM customers;`

Part 3: Using Literal Character Strings

1. SELECT

```
'The' || name || ' team has ' || number_of_players ||  
'players' || 'players and receives a discount of ' ||  
FROM teams  
WHERE id = 't001';
```

2. This happens if the last team doesn't have a corresponding entry in the table that defines the discount for teams.

PART 3

Part 1: Using the WHERE clause

```
1. SELECT * FROM customers
   WHERE ctr_number = 'c01986';
```

```
2. SELECT
   first_name AS "First Name",
   last_name AS "Last Name",
   ctr_number AS "Customer Number"
FROM customers
WHERE current_balance > 100;
```

```
3. SELECT
   id AS "Order ID",
   odr_date AS "Order Date"
   odr_time AS "Order Time"
FROM orders
WHERE odr_date < TO_DATE ('28-May-2019',
'DD-MM-YYYY');
```

Part 2: Range Conditions: BETWEEN Operator

```
1. SELECT
   il.id AS inventory_id,
   il.cost,
   il.units
FROM inventory_list il
WHERE il.cost BETWEEN 3.00 AND 15.00;
```

Part 3: Membership Conditions : IN Operator

```
1. SELECT id AS inventory_id, cost, units
FROM inventory_list
WHERE units IN (50, 100, 150, 200);
```

Part 4: Memberships Conditions : NOT IN OPERATOR

```
1. SELECT
    il.id AS inventory_id,
    il.cost,
    il.units
FROM inventory_list il
WHERE il.units NOT IN (50, 100, 150, 200);
```

Part 5: Pattern Matching : LIKE Operator

```
1. SELECT
    itm_number AS "Item Number",
    itm_name AS "Item Name"
FROM items
WHERE name LIKE 'g%';
```

Part 6: Pattern Matching : Combining Wildcard Characters with the LIKE Operator

```
1. SELECT itm_number AS "Item Number",
    itm_name AS "Item Name"
FROM items
WHERE name LIKE '%o%'.
```

PART 4

Part 1: Using the NULL Conditions

1. SELECT

```
name || 'team has' || number_of_players ||  
'players and does not receive a discount' AS  
"Team Information"
```

FROM

teams

WHERE

discount IS NULL;

2. SELECT

```
name || 'team has' || number_of_players || ' players  
and receives a discount of ' ||  
NVL(TO_CHAR(discount) || 'percent', 'no discount')  
AS "Team Information"
```

FROM

teams

WHERE

discount IS NOT NULL;

Part 2:

SELECT

ctr_number "Customer Number",
address_line_1 "Street Address",
zip_code "Postal Code"

FROM customers_addresses

WHERE city = 'Liverpool' AND address_line 2 = 'Stanford';

Part 3:

SELECT

ctr_number "Customer Number",
address_line_1 "Street Address",
zip_code "Postal Code"

FROM customers_addresses

WHERE city = 'Liverpool' OR address_line 2 = 'Stanford';

Part 4:

SELECT

ctr_number "Customer Number",
address_line_1 "Street Address",
zip_code "Postal Code"

FROM customers_addresses

WHERE city NOT IN 'Liverpool'

PART 5

1. SELECT

```
name "Team Name",  
number_of_players "Number of Players"  
FROM teams  
ORDER BY name;
```

2. SELECT

```
name "Team Name",  
number_of_players "Number of Players"  
FROM teams  
ORDER BY number_of_players DESC;
```

3. SELECT

```
name "Team Name",  
number_of_players "Number of Players"  
FROM teams  
ORDER BY "Team Name" DESC;
```


PART 6

Part 1:

1. SELECT

```
first_name || ' ' || last_name AS "Customer Name"  
FROM customers  
WHERE ROWNUM <= 3  
ORDER BY ctr_number
```

Part 2:

1. ACCEPT commission_rate NUMBER PROMPT

'Enter Commission Rate: ';

```
SELECT first_name "First Name", last_name "Last Name"  
FROM sales_representatives  
WHERE commission_rate = commission_rate  
ORDER BY last name;
```

OUTPUT

PART 1

Part 1:

1.

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	-
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	-	-	lc1015
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	-
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	-	-	lc2341
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-

2.

ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT
t001	Rockets	25	10
t002	Celtics	42	20
t003	Rovers	8	-

3.

ITM_NUMBER	NAME	DESCRIPTION	CATEGORY	COLOR	Size	ILT_ID
im01101044	gloves	catcher mitt	clothing	brown	m	il010230124
im01101045	under shirt	top worn under the game top	clothing	white	s	il010230125
im01101046	socks	team socks with emblem	clothing	range	l	il010230126
im01101047	game top	team shirt with emblem	clothing	range	m	il010230127
im01101048	premium bat	high quaity baseball bat	equipment	-	-	il010230128

Part 2:

1.

CTR_NUMBER	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER
c00001	Robert	Thornberry	bob.thornberry@heatmail.com	01234567898
c00012	Jennifer	Jones	Jjones@freemail.com	01505214598
c00101	John	Doe	unknown@here.com	03216547808
c00103	Andrew	Murcia	MurciaA@globaltech.com	07715246890
c01986	Maria	Galant	margal87@delphiview.com	01442736589

2.

NAME	NUMBER_OF_PLAYERS
Rockets	25
Celtics	42
Rovers	8

3.

NAME	DESCRIPTION	CATEGORY
gloves	catcher mitt	clothing
under shirt	top worn under the game top	clothing
socks	team socks with emblem	clothing
game top	team shirt with emblem	clothing
premium bat	high quaity basball bat	equipment

PART 2

Part 1:

1.

[illegible]

2.

FIRST_NAME	LAST_NAME	CTR_NUMBER	CURRENT_BALANCE	BALANCE_AFTER_GIFT
Robert	Thornberry	c00001	150	145
Jennifer	Jones	c00012	0	-5
John	Doe	c00101	987.5	982.5
Andrew	Murcia	c00103	85	80
Maria	Galant	c01986	125.65	120.65

Part 2:

[illegible]

Part 3:

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

PART 3

Part 1:

1.

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
c01986	mangal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-

2.

First Name	Last Name	Customer Number
Robert	Thornberry	c00001
John	Doe	c00101
Maria	Galant	c01986

3.

Order ID	Order Date	Order Time
or0101250	17-APR-17	17-APR-17
or0101350	24-MAY-17	24-MAY-17
or0101425	28-MAY-17	28-MAY-17
or0101681	02-JUN-17	02-JUN-17
or0101750	18-JUN-17	18-JUN-17

Part 2:

INVENTORY_ID	COST	UNITS
il010230125	7.99	250
il010230126	5.24	87

Part 3:

INVENTORY_ID	COST	UNITS
il010230124	2.5	100

Part 4:

INVENTORY_ID	COST	UNITS
il010230125	7.99	250
il010230126	5.24	87
il010230127	18.95	65
il010230128	97.46	8

Part 5:

Item Number	Item Name
im01101044	gloves
im01101047	game top

Part 6:

Item Number	Item Name
im01101044	gloves
im01101046	socks
im01101047	game top

PART 4

Part 1:

1.

Team Information
Rovers team has 8 players and does not receive a discount

2.

Team Information
Rockets team has 25 players and receives a discount of 10 percent
Celtics team has 42 players and receives a discount of 20 percent

Part 2:

Customer Number	Street Address	Postal Code
c00001	17 Gartsquare Road	LP89JHK

Part 3 :

Customer Number	Street Address	Postal Code
c00001	83 Barrhill Drive	LP79HJK
c00001	17 Gartsquare Road	LP89JHK
c00001	63 Acacia Drive	LP83JHR

Part 4:

Customer Number	Street Address	Postal Code
c00101	54 Ropehill Crescent	ST45AGV
c01986	36 Watercress Lane	JP23YTH

PART 5

1.

Team Name	Number of Players
Celtics	42
Rockets	25
Rovers	8

2.

Team Name	Number of Players
Celtics	42
Rockets	25
Rovers	8

3.

Team Name	Players
Rovers	8
Rockets	25
Celtics	42

PART 6

Part 1:

Customer Name
Robert Thornberry
Jennifer Jones
John Doe

Part 2:

First Name	Last Name
Charles	Raymond
Barry	Speed
Victoria	Wright