

Lab Exercise 3

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Part 1

A. 1. SELECT * FROM CUSTOMERS ;

2. SELECT * FROM TEAMS ;

3. SELECT * FROM ITEMS ;

B. 1. SELECT cfr_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

A. 1. SELECT first_name, last_name, current_balance,
current_balance / 12 AS monthly_payment
FROM CUSTOMERS ;2. SELECT first_name, last_name, cfr_number, current_balance
current_balance - 5.00 AS adjusted_balance
FROM CUSTOMERS ;3. The adjusted balance will be negative value if the current_balance
is less than 5 .B. 1. SELECT
first_name AS "First Name",
last_name AS "Last Name",
current_balance AS "Balance",
current_balance / 12 AS "Monthly Repayments"
FROM CUSTOMERS ;

C. 1. SELECT

'The || name || team has || number_of_players || ' players and
receives a discount of || discount || ' percent.' AS "Team Information"
FROM TEAMS ;

2. When concatenating the string in the query, the absence of a value in the discount column for the last team is interpreted as unknown, resulting in the absence of a specific discount displayed in the result.

Part 3

A. 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",  
adr-date AS "Order Date",  
adr-time AS "Order Time",  
FROM ORDERS  
WHERE adr-date > TO_DATE('28-May-2019', 'DD-MM-YYYY');
```

B. 1. SELECT

```
il.id AS "Inventory ID",  
il.cost AS "Trade Cost",  
il.units AS "Number of Units",  
FROM INVENTORY_LIST il  
WHERE il.cost BETWEEN 3.00 AND 15.00;
```

C. 1. SELECT

```
id AS "Inventory ID",  
cost AS "Trade Cost",  
units AS "Number of Units".  
FROM INVENTORY_LIST  
WHERE units IN (50, 100, 150, 200);
```

D. 1. SELECT

```
id AS "Inventory ID",
cost AS "Trade Cost",
units AS "Number of Units"
FROM INVENTORY_LIST
WHERE units NOT IN (50, 100, 150, 200);
```

E. 1. SELECT

```
itm_number AS "Item Number",
name AS "Item Name"
FROM ITEMS
WHERE name LIKE 'g%';
```

F. 1. SELECT

```
itm_number AS "Item Number",
name AS "Item Name"
FROM ITEMS
WHERE name LIKE '%o%';
```

Part 4

A. 1. SELECT

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

```
FROM TEAMS
WHERE discount IS NULL;
```

2. SELECT

'The ' || name || ' team has ' || number_of_players || ' players and receive a discount.' AS "Team Information"

```
FROM TEAMS
WHERE discount IS NOT NULL;
```

B. 1. SELECT

```
ctr_number AS "Customer Number",
address_line AS "Street Address",
zip_code AS "Postal Code"
FROM CUSTOMERS_ADDRESSES
WHERE city = 'Liverpool' AND address_line_2 = 'Starford';
```

C. 1. SELECT

```
ctr-number AS "Customer Number",
address_line AS "Street Address",
zip_code AS "Postal Code"
FROM CUSTOMERS_ADDRESSES
WHERE city = 'Liverpool' OR address_line_2 = 'Starford';
```

D. 1. SELECT

```
ctr-number AS "Customer Number",
address_line AS "Street Address",
zip_code AS "Postal Code"
FROM CUSTOMERS_ADDRESSES
WHERE city NOT LIKE 'Liverpool';
```

Part 5

A. 1. SELECT

```
name AS "Team Name",
number_of_players AS "Number of Players"
FROM TEAMS
ORDER BY "Team Name" ASC;
```

2. SELECT

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

3. SELECT

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

Part 6

A. 1. SELECT
first_name || ' ' || last_name AS "Customer Name"
FROM (
SELECT
first_name, last_name,
ROWNUM AS rnum
FROM CUSTOMERS
ORDER BY ctr_number
)
WHERE rnum <= 3 ;

B. 1. SELECT
first_name AS "First Name",
last_name AS "Last Name"
FROM SALES-REPRESENTATIVES
WHERE
ORDER BY last_name ;

Appendix

Part 1

Part 1

1.

```
1 select* from customers;
```

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	-
c02001	brianrog@hootech.com	Brain	Rogers	01654564898	50	-	-	lc4587

2.

```
select* from teams;
```

ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT
t001	Rockets	25	10
t002	Celtics	42	20
t003	Rovers	8	-
t004	Jets	10	5

3.

```
1 select* from items;
```

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 quality baseball bat	equipment	-	-	il010230128

Part 2

1.

```
1 v SELECT ctr_number, first_name, last_name, email, phone_number  
2      FROM customers;
```

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
c02001	Brain	Rogers	brianrog@hootech.com	01654564898

2.

```
1 v SELECT name, number_of_players  
2      FROM teams;
```

NAME	NUMBER_OF_PLAYERS
Rockets	25
Celtics	42
Rovers	8
Jets	10

3.

```
1 v SELECT name, description, category  
2      FROM items;
```

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 quality baseball bat	equipment

Part 2

Part 1

1.

```
1 v SELECT
2     first_name,
3     last_name,
4     current_balance,
5     current_balance / 12 AS monthly_payment
6 FROM customers;
```

2.

```
1 v SELECT
2   first_name,
3   last_name,
4   ctr_number,
5   current_balance,
6   current_balance - 5.00 AS adjusted_balance
7   FROM customers;
```

FIRST_NAME	LAST_NAME	CTR_NUMBER	CURRENT_BALANCE	ADJUSTED_BALANCE
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
Brain	Rogers	c02001	50	45

Part 2

1.

```
1 v SELECT
2     first_name AS "First Name",
3     last_name AS "Last Name",
4     current_balance AS "Balance",
5     current_balance / 12 AS "Monthly Repayments"
6 FROM customers;
```

Part 3

1.

```
1 v SELECT
2   'The ' || name || ' team has ' || number_of_players || ' players and receives a discount of ' || discount || ' percent.' AS "Team Information"
3   FROM teams;
```

Team Information

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

The Celtics team has 42 players and receives a discount of 20 percent.

The Rovers team has 8 players and receives a discount of percent.

The Jets team has 10 players and receives a discount of 5 percent.

Part 3

Part 1

1.

```
1 v SELECT *
2      FROM customers
3      WHERE ctr_number = 'c01986';
```

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	-

2.

```
1 v SELECT
2      first_name AS "First Name",
3      last_name AS "Last Name",
4      ctr_number AS "Customer Number"
5      FROM customers
6      WHERE current_balance > 100;
```

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

3.

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

	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

1.

```
1 v SELECT
2     il.id AS "Inventory ID",
3     il.cost AS "Trade Cost",
4     il.units AS "Number of Units"
5   FROM inventory_list il
6 WHERE il.cost BETWEEN 3.00 AND 15.00;
```

	Inventory ID	Trade Cost	Number of Units
	il010230125	7.99	250
	il010230126	5.24	87

Part 3

1.

```
1 v SELECT
2     id AS "Inventory ID",
3     cost AS "Trade Cost",
4     units AS "Number of Units"
5     FROM inventory_list
6     WHERE units IN (50, 100, 150, 200);
```

Inventory ID	Trade Cost	Number of Units
il010230124	2.5	100

Part 4

1.

```
1 v SELECT
2     id AS "Inventory ID",
3     cost AS "Trade Cost",
4     units AS "Number of Units"
5     FROM inventory_list
6     WHERE units NOT IN (50, 100, 150, 200);
```

Inventory ID	Trade Cost	Number of Units
il010230125	7.99	250
il010230126	5.24	87
il010230127	18.95	65
il010230128	97.46	8

Part 5

1.

```
1 v SELECT
2     item_number AS "Item Number",
3     name AS "Item Name"
4     FROM items
5     WHERE name LIKE 'g%';
```

Item Number	Item Name
im01101044	gloves
im01101047	game top

Part 6

1.

```
1 v SELECT
2     item_number AS "Item Number",
3     name AS "Item Name"
4     FROM items
5     WHERE name LIKE '%o%';
```

Item Number	Item Name
im01101044	gloves
im01101046	socks
im01101047	game top

Part 4

Part 1

1.

```
1 v SELECT
2   'The ' || name || ' team has ' || number_of_players || ' players and does not receive a discount.' AS "Team Information"
3   FROM teams
4   WHERE discount IS NULL;
```

Team Information

The Rovers team has 8 players and does not receive a discount.

2.

```
1 v SELECT
2   'The ' || name || ' team has ' || number_of_players || ' players and receive a discount.' AS "Team Information"
3   FROM teams
4   WHERE discount IS NOT NULL;
```

Team Information

The Rockets team has 25 players and receive a discount.

The Celtics team has 42 players and receive a discount.

The Jets team has 10 players and receive a discount.

Part 2

1.

```
1 v SELECT
2   ctr_number AS "Customer Number",
3   address_line_1 AS "Street Address",
4   zip_code AS "Postal Code"
5   FROM customers_addresses
6   WHERE city = 'Liverpool' AND address_line_2 = 'Starford';
```

Customer Number	Street Address	Postal Code
c00001	17 Gartsquare Road	LP89JHK

Part 3

1.

```
1 v SELECT
2     ctr_number AS "Customer Number",
3     address_line_1 AS "Street Address",
4     zip_code AS "Postal Code"
5 FROM customers_addresses
6 WHERE city = 'Liverpool' OR address_line_2 = 'Starford';
```

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

Part 4

1.

```
1 v SELECT
2     ctr_number AS "Customer Number",
3     address_line_1 AS "Street Address",
4     zip_code AS "Postal Code"
5 FROM customers_addresses
6 WHERE city NOT LIKE 'Liverpool'
```

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

Part 5

Part 1

1.

```
1 v SELECT
2     name AS "Team Name",
3     number_of_players AS "Number of Players"
4     FROM teams
5     ORDER BY "Team Name" ASC;
```

Team Name	Number of Players
Celtics	42
Jets	10
Rockets	25
Rovers	8

2.

```
1 v SELECT
2     name AS "Team Name",
3     number_of_players AS "Number of Players"
4     FROM teams
5     ORDER BY "Number of Players" DESC;
```

Team Name	Number of Players
Celtics	42
Rockets	25
Jets	10
Rovers	8

3.

```
1 v SELECT
2     name AS "Team Name",
3     number_of_players AS "Number of Players"
4     FROM teams
5     ORDER BY "Team Name" DESC;
```

Team Name	Number of Players
Rovers	8
Rockets	25
Jets	10
Celtics	42

Part 6

1.

```
1 v SELECT
2     first_name || ' ' || last_name AS "Customer Name" |
3     FROM (
4         SELECT
5             first_name,
6             last_name,
7             ROWNUM AS rnum
8             FROM customers
9             ORDER BY ctr_number
10        )
11    WHERE rnum <= 3;
```

Customer Name
Robert Thornberry
Jennifer Jones
John Doe

2.

```
1 v SELECT
2     first_name AS "First Name",
3     last_name AS "Last Name"
4 FROM sales_representatives
5 WHERE commission_rate = :input_commission_rate
6 ORDER BY last_name;
```

	First Name	Last Name
1	Barry	Speed
2	Victoria	Wright