

PART 1

1. Using SELECT* statement

a. Customers

SELECT*FROM customers

CTR_NU	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBE	CURRENT_BALANCE	SRE_	TEM_	LOYALT
c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	
c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0		1c1015	
c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	
c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85		1c2341	
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	
t004	brianrog@hootech.com	Brian	Rogers	01654564898	50		1c4587	

b. Teams

SELECT*FROM teams

ID	NAME	NUMBER_OF_PLAYERS	DISCOUNT
1 t001	Rockets	25	10
2 t002	Celtics	42	20
3 t003	Rovers	8	(null)
4 t004	Jets	10	5

c. Items

SELECT*FROM items

ITM_NUMBER	NAME	DESCRIPTION	CATEGORY	COLOR	Size	ILT_ID
1 im01101044	gloves	catcher mitt	clothing	brown	m	i1010230124
2 im01101045	under shirt	top worn under the game top	clothing	white	s	i1010230125
3 im01101046	socks	team socks with emblem	clothing	range	l	i1010230126
4 im01101047	game top	team shirt with emblem	clothing	range	m	i1010230127
5 im01101048	premium bat	high quaity baseball bat	equipment	(null)	(null)	i1010230128

1. Display

```
SELECT ctr_number, first_name, last_name, phone_number
FROM customers
```

CTR_NU	FIRST_NAME	LAST_NAME	PHONE_NUMBE
c00001	Robert	Thornberry	01234567898
c00012	Jennifer	Jones	01505214598
c00101	John	Doe	03216547808
c00103	Andrew	Murcia	07715246890
c01986	Maria	Galant	01442736589
t004	Brian	Rogers	01654564898

2. Display

```
SELECT name, number_of_players
FROM teams
```

NAME	NUMBER_OF_PLAYERS
Rockets	25
Celtics	42
Rovers	8
Jets	10

3. Display

```
SELECT name, description, category
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 quaiity baseball bat	equipment

PART 2

1. Monthly payment

```
SELECT first_name, last_name, current_balance, current_balance/12  
FROM customers
```

FIRST_NAME	LAST_NAME	CURRENT_BALANCE	CURRENT_BALANCE/12
Robert	Thornberry	150	12.5
Jennifer	Jones	0	0
John	Doe	987.5	82.2916667
Andrew	Murcia	85	7.08333333
Maria	Galant	125.65	10.4708333
Brian	Rogers	50	4.16666667

2. current balance – 5

```
SELECT first_name, last_name, current_balance, current_balance - 5  
FROM customers
```

FIRST_NAME	LAST_NAME	CURRENT_BALANCE	CURRENT_BALANCE-5
Robert	Thornberry	150	145
Jennifer	Jones	0	-5
John	Doe	987.5	982.5
Andrew	Murcia	85	80
Maria	Galant	125.65	120.65
Brian	Rogers	50	45

3. The value of 0 when minus with the 5 will get negative value while the constraints for the current balance is ≥ 0 . The column only calculate.

1. Column Alias

```
SELECT first_name "First Name", last_name "Last Name", current_balance  
"Balance", current_balance/12 "Monthly Repayments"  
FROM customers
```

First Name	Last Name	Balance	Monthly Repayments
Robert	Thornberry	150	12.5
Jennifer	Jones	0	0
John	Doe	987.5	82.2916667
Andrew	Murcia	85	7.08333333
Maria	Galant	125.65	10.4708333
Brian	Rogers	50	4.16666667

1. Literal String

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

2. There is null value in the discount column for the Rovers team

PART 3

1. Maria Glant

```
SELECT * FROM customers
WHERE ctr_number = 'c01986'
```

CTR_NU	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBE	CURRENT_BALANCE	SRE_TEM	LOYALT
c01986	margal87@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003

2. Current Balance >= 100

```
SELECT first_name, last_name, ctr_number
FROM customers
WHERE current_balance >= 100
```

FIRST_NAME	LAST_NAME	CTR_NU
Robert	Thornberry	c00001
John	Doe	c00101
Maria	Galant	c01986

3. Order 28th May 2019

```
SELECT id, odr_date, odr_time
FROM orders
WHERE odr_date < '28-May-2019'
```

ID	ODR_DATE	ODR_TIME
or0101250	17/04/2017	17/04/2017
or0101350	24/05/2017	24/05/2017
or0101425	28/05/2017	28/05/2017
or0101681	02/06/2017	02/06/2017
or0101750	18/06/2017	18/06/2017

1. BETWEEN 3.00 and 15.00

```
SELECT id, cost, units
FROM inventory_list
WHERE cost BETWEEN 3.00 AND 15.00
```

ID	COST	UNITS
i1010230125	7.99	250
i1010230126	5.24	87

1. IN (50, 100, 150, 200)

```
SELECT id, cost, units
FROM inventory_list
WHERE units IN (50, 100, 150, 200)
```

ID	COST	UNITS
i1010230124	2.5	100

1. NOT IN (50, 100, 150, 200)

```
SELECT id, cost, units
FROM inventory_list
WHERE units NOT IN (50, 100, 150, 200)
```

ID	COST	UNITS
i1010230125	7.99	250
i1010230126	5.24	87
i1010230127	18.95	65
i1010230128	97.46	8

1. LIKE 'g%'

```
SELECT itm_number, name
FROM items
WHERE name LIKE 'g%'
```

ITM_NUMBER	NAME
im01101044	gloves
im01101047	game top

1.

```
SELECT itm_number "Item Number", name  
FROM items  
WHERE name LIKE '_o%'
```

ItemNumber	Name
im01101044	gloves
im01101046	socks
im01101047	game top

PART 4

1. Discount is NULL

```
SELECT 'The ' || name || ' team has ' || number_of_players || ' players and  
does not receive a discount of ' AS "Team Information"  
FROM teams  
WHERE discount is NULL ;
```

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

2. Discount is 10 percent

```
SELECT 'The ' || name || ' team has ' || number_of_players || ' players and  
receive a discount of ' || discount || ' percent' AS "Team Information"  
FROM teams  
WHERE discount = 10 ;
```

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

1. City = 'Liverpool' AND address_line_2 = 'Starford'

```
SELECT ctr_number "Customer Number", address_line_1 "Street Address", zip_code  
"Postal Code"  
FROM customers_addresses  
WHERE city = 'Liverpool'  
AND address_line_2 = 'Starford' ;
```

Custom	Street Address	Postal
c00001	17 Gartsquare Road	LP89JHK

1. City = 'Liverpool' OR address_line_2 = 'Starford'

```
SELECT ctr_number "Customer Number", address_line_1 "Street Address", zip_code  
"Postal Code"  
FROM customers_addresses  
WHERE city = 'Liverpool'  
OR address_line_2 = 'Starford' ;
```

Custom	Street Address	Postal
c00001	17 Gartsquare Road	LP89JHK
c00001	63 Acacia Drive	LP83JHR

1. City NOT IN Liverpool

```
SELECT ctr_number "Customer Number", address_line_1 "Street Address", zip_code  
"Postal Code"  
FROM customers_addresses  
WHERE city NOT IN 'Liverpool'
```

Custom	Street Address	Postal
c00101	54 Ropehill Crescent	ST45AGV
c01986	36 Watercress Lane	JP23YTH

PART 5

1. Name ascending

```
SELECT ROWNUM, first_name || ' ' || last_name "Customer Name"  
FROM (SELECT first_name, last_name  
      FROM customers  
      ORDER BY ROWNUM ASC)  
WHERE ROWNUM <= 3
```

NAME	Number of Player
Celtics	42
Jets	10
Rockets	25
Rovers	8

2. Name Descending

```
SELECT first_name, last_name "Last Name", commission_rate "Commission Rate"  
FROM sales_representatives  
WHERE commission_rate =: com_rate  
ORDER BY last_name
```

NAME	Number of Player
Rovers	8
Rockets	25
Jets	10
Celtics	42

3. Alias Column

```
SELECT name "Team Name", number_of_players "Player"  
FROM teams  
ORDER BY DESC
```

Team Name	Player
Rovers	8
Rockets	25
Jets	10
Celtics	42

PART 6

1. TOP-N-ANALYSIS

```
SELECT ROWNUM, first_name || ' ' || last_name "Customer Name"
FROM (SELECT first_name, last_name
      FROM customers
      ORDER BY ROWNUM ASC)
WHERE ROWNUM <= 3
```

ROWNUM	Customer Name
1	Robert Thornberry
2	Jennifer Jones
3	John Doe

2. Substitution

```
SELECT first_name, last_name "Last Name", commission_rate "Commission Rate"
FROM sales_representatives
WHERE commission_rate =: com_rate
ORDER BY last_name
```

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