Tay shun wei: lab 3 AJJECO110

Part1

8 Part 1 Retrieving all columns from a table

1. SELECT * FROM customers;

2. SELECT * FROM teams;

3. SELECT * FROM items;

Part 2 Selecting Specific Columns

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 customer
2. SELECT first_name, last_name, ctr_number, current_balance, current_balance-5.00 AS adjusted_balance FROM customers;
3. when current balance is zero, the adjusted_balance becomes -5 which is illogical in real world

Part 2: using Column Aliases

1. SELECT first_name as "First Name", last_name "Last Name", current_balance "Balance",
current_balance/12 "Monthly Repayments" FROM customer;

Ø. Part 3: using Literal character Strings

1. SELECT 'the' || name || 'team has' || number_of-players || 'players and receives a discount of' ||
discount || 'percent'. "Team Information" FROM teams;

2. IT is because the discount of the last team (Rovars) is null

Part 3

Part 1 : Using the WHERE clause

1. SELECT * FROM customs WF WHERE ctr-number='CD1986';
2. SELECT first-name, last-name, ctr-number FROM customers WHERE current-balance >100;
3. SELECT id, odr-date, odr-time. FROM orders WHERE odr-date < '2ÊÈMay-2019';

Part 2: Range conditions : Between Operators

1. SELECT id, cost, units FROM inventory-list WHERH cost between 3.00 and 15.00;

Part 3: Membership condition : IN Operator

1. SELECT id, cost, units FROM inventory-list WHERH units IN (50,100,150,200);

Part 4: membership conditions: Not In Operator

1. SELECT id, cost, units FROM inventory-list WHERE units Not IN (50,100,150,200);

Part 5: Pattern Matching: Like operator

1. SELECT itm-number "Item Number", name "Item Name") FROM items WHERE name LIKE 'q%';

Part 6: Pattern matching: combining wildcard characters with the LIKE Operator

1. SELECT itm-number "Item Number", name "Item Name" FROM itons WHERE name LIKE '%o%';

Part 4

Part 1 : using the NULL conditions

1. SELECT 'The' || name || 'team has ' || number-of-players || 'Players and does not receive a discount.
   " TEAM Information" FROM teams WE WHERE discount is NULL;

2. SELECT 'The' || name || 'team has' || number-of-players || 'players and receives a discount of '|| discount
   'percent.' "TEAM Information" FROM teams WHERH discount is NOT NULL;

Part 2: Logical operators: AND

1. SELECT ctr-number "Customer Number", address-line-1 "street Address", zip-code "postal co
   FROM customers-addresses WHERE city = 'Liverpool' AND address-line-2 = 'starford';

Part 3: Logical operators: OR

1. SELECT ctr-number "Customer Number", address_line_1 "Street Address", zip_code "Postal code"
   FROM customers_address WHERE city='Liverpool' OR address-line-2.='Starford';

Part 4: Logical Operators: NOT Equal to

1. SELECT ctr_number "Customer Number", address_line_1 "Street Address", zip_code "Postal code"
   FROM customers_addresses WHERE city Not Like '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 name DESC;

Part 6

Part 1: TOP-N-ANALYSIS

1. SELECT first_name ||','|| last_name "Customer Name"
   FROM (
        SELECT first_name, last_name, RowNum FROM customers
        ORDER BY ctr_number
)

        WHERE RowNum <= 3;

Part 2 : Using a Substitution Variable

1. SELECT first_name "First Name", last_name " Last_Name" FROM Sales_representatives
   WHERE commission_rate =: input_commission_rate
   ORDER BY last_name;

Part 1

Part 1: Retrieving all columns from a table

1. customers

CTR_NUMBER	EMAIL	FIRST_NAME	LAST_NAME	PHONE_NUMBER	CURRENT_BALANCE	SRE_ID	TEM_ID	LOYALTY_CARD_NUMBER
1 c00001	bob.thornberry@heatmail.com	Robert	Thornberry	01234567898	150	sr01	t001	(null)
2 c00012	Jjones@freemail.com	Jennifer	Jones	01505214598	0	(null)	(null)	lc1015
3 c00101	unknown@here.com	John	Doe	03216547808	987.5	sr01	t002	(null)
4 c00103	MurciaA@globaltech.com	Andrew	Murcia	07715246890	85	(null)	(null)	lc2341
5 c01986	marga187@delphiview.com	Maria	Galant	01442736589	125.65	sr03	t003	(null)
6 c02001	brianrog@hootech.com	Brian	Rogers	01654564898	50	(null)	(null)	lc4587

2. 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

3.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 basball bat	equipment	(null)	(null)	i1010230128

Part 2: Selectng Specifc Columns

1.

	CTR_NUMBER	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER
1	c00001	Robert	Thornberry	bob.thornberry@heatmail.com	01234567898
2	c00012	Jennifer	Jones	Jjones@freemail.com	01505214598
3	c00101	John	Doe	unknown@here.com	03216547808
4	c00103	Andrew	Murcia	MurciaA@globaltech.com	07715246890
5	c01986	Maria	Galant	marga187@delphiview.com	01442736589
6	c02001	Brian	Rogers	brianrog@hootech.com	01654564898

2.

	NAME	NUMBER_OF_PLAYERS
1	Rockets	25
2	Celtics	42
3	Rovers	8
4	Jets	10

3.

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

Part 2

Part 1: Using Arithmetic Operators

1.

	FIRST_NAME	LAST_NAME	CURRENT_BALANCE	MONTHLY_PAYMENT
1	Robert	Thornberry	150	12.5
2	Jennifer	Jones	0	0
3	John	Doe	987.5	82.2916666666666666666666666666666666666667
4	Andrew	Murcia	85	7.0833333333333333333333333333333333333333
5	Maria	Galant	125.65	10.470833333333333333333333333333333333333
6	Brian	Rogers	50	4.1666666666666666666666666666666666666667

2.

	FIRST_NAME	LAST_NAME	CTR_NUMBER	CURRENT_BALANCE	ADJUSTED_BALANCE
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

Part 2 : Using Column Aliases

1.

First Name	Last Name	Balance	Monthly Repayments
1 Robert	Thornberry	150	12.5
2 Jennifer	Jones	0	0
3 John	Doe	987.5	82.2916666666666666666666666666666666666667
4 Andrew	Murcia	85	7.0833333333333333333333333333333333333333
5 Maria	Galant	125.65	10.4708333333333333333333333333333333333333
6 Brian	Rogers	50	4.1666666666666666666666666666666666666667

Part 3: Using Literal Character Strings

1.

Team Information
1 The Rockets team has 25 players and receives a discount of10 percent.
2 The Celtics team has 42 players and receives a discount of20 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 of5 percent.

Part 3

Part 1: Using the WHERE Clause

1.

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

2.

FIRST_NAME	LAST_NAME	CTR_NUMBER
1 Robert	Thornberry	c00001
2 John	Doe	c00101
3 Maria	Galant	c01986

3.

ID	ODR_DATE	ODR_TIME
1 or0101250	17-APR-17	17-APR-17
2 or0101350	24-MAY-17	24-MAY-17
3 or0101425	28-MAY-17	28-MAY-17
4 or0101681	02-JUN-17	02-JUN-17
5 or0101750	18-JUN-17	18-JUN-17

Part 2: Range Conditions: BETWEEN Operator

1.

	ID	COST	UNITS
1	i1010230125	7.99	250
2	i1010230126	5.24	87

Part 3: Membership Conditions: IN Operator
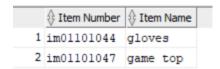
1.

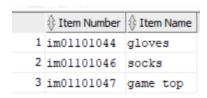|	ID	COST	UNITS
1	i1010230124	2.5	100

Part 4: Membership Conditions: NOT IN Operator

1.

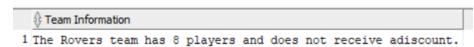|	ID	COST	UNITS
1	i1010230125	7.99	250
2	i1010230126	5.24	87
3	i1010230127	18.95	65
4	i1010230128	97.46	8

Part 5: Pattern Matching: LIKE Operator

1.

	Item Number	Item Name
1	im01101044	gloves
2	im01101047	game top

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

1.

	Item Number	Item Name
1	im01101044	gloves
2	im01101046	socks
3	im01101047	game top

Part 4

Part 1: Using the NULL Conditions

1.

Team Information
1 The Rovers team has 8 players and does not receive adiscount.

2.

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

Part 2: Logical Operators: AND

1.

Customer Number	Street Address	Postal Code
1 c00001	17 Gartsquare Road	LP89JHK

Part 3: Logical Operators: OR

1.

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

Part 4: Logical Operators: NOT Equal To

1.

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

Part 5

1.

	Team Name	Number of Players
1	Celtics	42
2	Jets	10
3	Rockets	25
4	Rovers	8

2.

	Team Name	Number of Players
1	Celtics	42
2	Rockets	25
3	Jets	10
4	Rovers	8

3.

	Team Name	Number of Players
1	Rovers	8
2	Rockets	25
3	Jets	10
4	Celtics	42

Part 6

Part 1 : TOP-N-ANALYSIS

1.

	Customer Name
1	Robert Thornberry
2	Jennifer Jones
3	John Doe

Part 2 : Using a Substitution Variable

1.The input is 5

	First Name	Last Name
1	Barry	Speed
2	Victoria	Wright