

(Reference: SQL*Plus User's Guide and Reference Chapter 6 Formatting SQL*Plus Reports)

Learning Objective:

1. Formatting output

(Refer to the **OrderProcessingScenario.doc** ERD to understand how to join the tables correctly.)

(You will write similar queries as presented here for your TASK 7 in your practical assignment.)

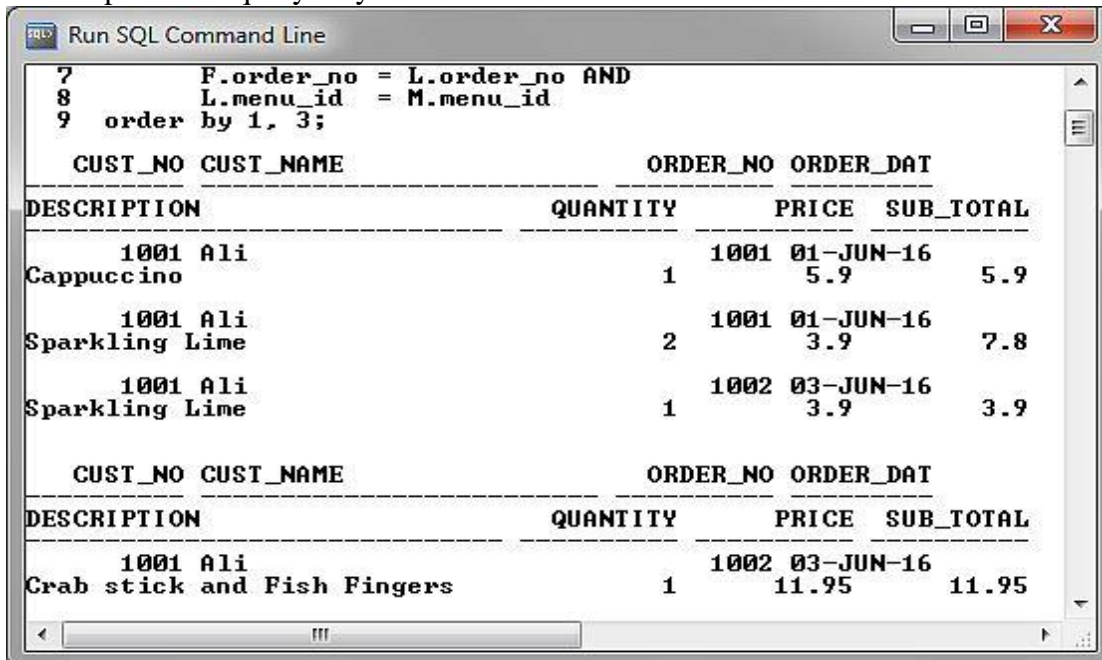
Execute the **newData.txt** script to create more records in your database.

Setting the SQL*Plus configuration for reporting

When you run a SQL query, the output is a form of report. For example, let's say you would like to list customers and their order details. You might write:

```
select C.cust_no, C.cust_name,
       F.order_no, F.order_date,
       M.description, L.quantity, L.price,
       (L.quantity*L.price) as Sub_Total
from customer C, food_order F, order_list L, menu M
where C.cust_no = F.cust_no AND
      F.order_no = L.order_no AND
      L.menu_id = M.menu_id
order by 1, 3;
```

The output of the query may look like this:



CUST_NO	CUST_NAME	ORDER_NO	ORDER_DAT	DESCRIPTION	QUANTITY	PRICE	SUB_TOTAL
1001	Ali	1001	01-JUN-16	Cappuccino	1	5.9	5.9
1001	Ali	1001	01-JUN-16	Sparkling Lime	2	3.9	7.8
1001	Ali	1002	03-JUN-16	Sparkling Lime	1	3.9	3.9
1001	Ali	1002	03-JUN-16	Crab stick and Fish Fingers	1	11.95	11.95

...looks messy and difficult to read.

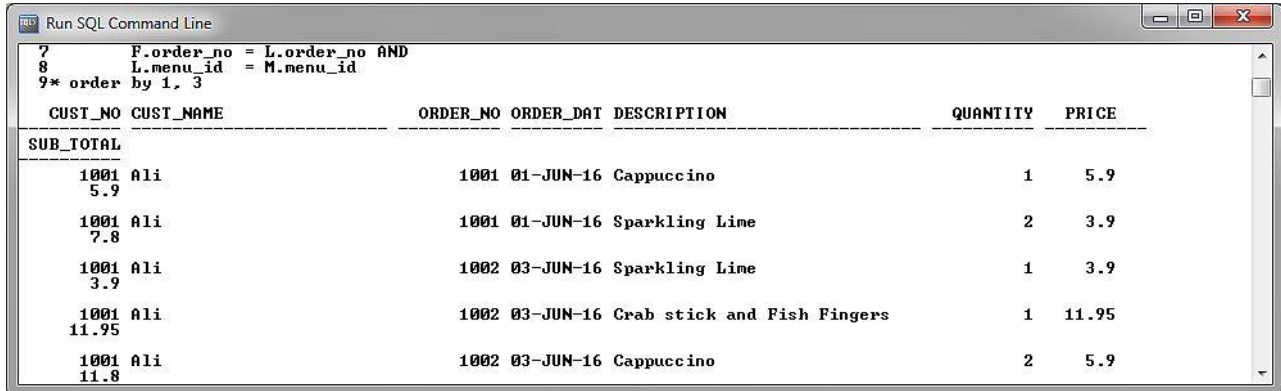
You need to format the output to make it into a presentable report.

Set the width and length of the report.

```
set linesize 120 -- default linesize is 80
set pagesize 30 - default pagesize is 14
```

(execute a SHOW ALL command to see all the default settings of SQL*Plus)

After setting the report width and height, execute the SQL statement again and observe the result.



CUST_NO	CUST_NAME	ORDER_NO	ORDER_DAT	DESCRIPTION	QUANTITY	PRICE
SUB_TOTAL						
1001	Ali	1001	01-JUN-16	Cappuccino	1	5.9
1001	Ali	1001	01-JUN-16	Sparkling Line	2	3.9
1001	Ali	1002	03-JUN-16	Sparkling Line	1	3.9
1001	Ali	1002	03-JUN-16	Crab stick and Fish Fingers	1	11.95
1001	Ali	1002	03-JUN-16	Cappuccino	2	5.9

Much better, but the total character count of each line still exceeds your linesize of 120. (Linesize 120 is the limit of the number of characters that can be printed across an A4 page in landscape orientation for font size 12)

Truncate the output of some data item to reduce the length of each row to within 120 characters.

```
column cust_name format A15
column description format A25 truncate
```

Now, execute the SQL statement again, the report should look presentable

CUST_NAME in **customer table** is defined as a string of 25 characters

DESCRIPTION in **menu table** is defined as a string of 30 characters

Look at the report and decide if any other attributes need to be format further.

Adding a title to the report

(Refer Chapter 6, Chapter 12 of the SQL*Plus User's Guide and Reference)

Adding a title for a report:

TTITLE CENTER 'Customer Analysis for ' _DATE -

RIGHT 'Page:' FORMAT 999 SQL.PNO SKIP

Execute the SQL query again.

You should get an output like this:

Run SQL Command Line

```

8      L.menu_id = M.menu_id
9* order by 1, 3

```

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CUST_NO	CUST_NAME	ORDER_NO	ORDER_DAT	DESCRIPTION	QUANTITY	PRICE	SUB_TOTAL
1001	Ali	1001	01-JUN-16	Cappuccino	1	5.9	5.9
1001	Ali	1001	01-JUN-16	Sparkling Lime	2	3.9	7.8
1001	Ali	1002	03-JUN-16	Sparkling Lime	1	3.9	3.9
1001	Ali	1002	03-JUN-16	Crab stick and Fish Finge	1	11.95	11.95
1001	Ali	1002	03-JUN-16	Cappuccino	2	5.9	11.8
1001	Ali	1003	05-JUN-16	Cappuccino	2	5.9	11.8
1001	Ali	1003	05-JUN-16	Crab stick and Fish Finge	2	11.95	23.9
6787	Mr Steven	3003	25-JUN-16	Satay Mixed	1	19.9	19.9
6787	Mr Steven	3003	25-JUN-16	Chicken Cabonara	1	13	13
6787	Mr Steven	3003	25-JUN-16	Chicken Pizza	1	11.5	11.5
6787	Mr Steven	3003	25-JUN-16	Seafood Risotto	2	14.5	29
6788	Ms Chan	3002	25-JUN-16	Vegeterian Pizza	1	12	12
6788	Ms Chan	3002	25-JUN-16	Asian Fusion Pasta	1	12.5	12.5
6788	Ms Chan	3002	25-JUN-16	Seafood Risotto	1	14.5	14.5
6788	Ms Chan	3002	25-JUN-16	Cheese Baked Rice	1	13.99	13.99

Now, read Chapter 6 (page 99 – page 107) and use the BREAK, COMPUTE command to enhance your reports further.

e.g. using BREAK

Run SQL Command Line

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CUST_NO	CUST_NAME	ORDER_NO	ORDER_DAT	DESCRIPTION	QUANTITY	PRICE	SUB_TOTAL
1001	Ali	1001	01-JUN-16	Cappuccino	1	5.9	5.9
				Sparkling Lime	2	3.9	7.8
		1002	03-JUN-16	Sparkling Lime	1	3.9	3.9
				Crab stick and Fish Finge	1	11.95	11.95
				Cappuccino	2	5.9	11.8
		1003	05-JUN-16	Cappuccino	2	5.9	11.8
				Crab stick and Fish Finge	2	11.95	23.9
6787	Mr Steven	3003	25-JUN-16	Satay Mixed	1	19.9	19.9
				Chicken Cabonara	1	13	13
				Chicken Pizza	1	11.5	11.5
				Seafood Risotto	2	14.5	29
6788	Ms Chan	3002	25-JUN-16	Vegeterian Pizza	1	12	12
				Asian Fusion Pasta	1	12.5	12.5
				Seafood Risotto	1	14.5	14.5
				Cheese Baked Rice	1	13.99	13.99
6789	Mr Lee	3001	25-JUN-16	Cheese Baked Rice	1	13.99	13.99
				Pineapple Fried Rice	1	12.5	12.5
				Meat Platter Mix	1	25	25

18 rows selected.

e.g. using BREAK and COMPUTE and other formatting

Run SQL Command Line

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CUST_NO	CUST_NAME	Order No.	ORDER_DAT	DESCRIPTION	QUANTITY	PRICE	SUB_TOTAL	
1001	Ali	1001	01-JUN-16	Cappuccino	1	\$5.90	\$5.90	
				Sparkling Lime	2	\$3.90	\$7.80	

		Total				\$13.70		
		1002	03-JUN-16	Sparkling Lime	1	\$3.90	\$3.90	
				Crab stick and Fish Finge	1	\$11.95	\$11.95	
				Cappuccino	2	\$5.90	\$11.80	

Total							\$27.65	
		1003	05-JUN-16	Cappuccino	2	\$5.90	\$11.80	
				Crab stick and Fish Finge	2	\$11.95	\$23.90	

		Total						
6787	Mr Steven	3003	25-JUN-16	Satay Mixed	1	\$19.90	\$19.90	
				Chicken Cabonara	1	\$13.00	\$13.00	
				Chicken Pizza	1	\$11.50	\$11.50	
				Seafood Risotto	2	\$14.50	\$29.00	

Total							\$73.40	
6788	Ms Chan	3002	25-JUN-16	Vegeterian Pizza	1	\$12.00	\$12.00	
				Asian Fusion Pasta	1	\$12.50	\$12.50	
				Seafood Risotto	1	\$14.50	\$14.50	

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CUST_NO	CUST_NAME	Order No.	ORDER_DAT	DESCRIPTION	QUANTITY	PRICE	SUB_TOTAL
6788	Ms Chan	3002	25-JUN-16	Cheese Baked Rice	1	\$13.99	\$13.99

Total							\$52.99
6789	Mr Lee	3001	25-JUN-16	Cheese Baked Rice	1	\$13.99	\$13.99
				Pineapple Fried Rice	1	\$12.50	\$12.50
				Meat Platter Mix	1	\$25.00	\$25.00

Total							\$51.49

18 rows selected.

18 rows selected.