

Exercise

1. Produce a list of ALL rows showing order number by combining data from SALES and SALES_HISTORY table.
2. Produce a list of DISTINCT rows from SALES and SALES_HISTORY table using column order number.
3. Produce a list of COMMON rows between SALES and SALES_HISTORY table using column order number.
4. Produce a list of rows which are present in SALES table and are not present in SALES_HISTORY table using column order number.

Copy and paste the below SQL's in SQL Developer and run them, You will get errors and try to correct those errors.

1. `SELECT ORDER_ID,CUSTOMER_ID FROM SALES
UNION ALL
SELECT ORDER_ID FROM SALES_HISTORY`
2. `SELECT SALES_DATE, ORDER_ID FROM SALES
UNION ALL
SELECT PRODUCT_ID, ORDER_ID FROM SALES`

Answers:

1. `SELECT order_id FROM sales
UNION ALL
SELECT order_id FROM sales_history;`
2. `SELECT order_id FROM sales
UNION
SELECT order_id FROM sales_history;`
3. `SELECT order_id FROM sales
INTERSECT
SELECT order_id FROM sales_history;`
4. `SELECT order_id FROM sales
MINUS
SELECT order_id FROM sales_history;`

Answers for errors:

- 1) You will get an error “ORA-01789: query block has incorrect number of result columns” when you run below SQL statement.

```
SELECT ORDER_ID, CUSTOMER_ID FROM SALES  
UNION ALL  
SELECT ORDER_ID FROM SALES_HISTORY
```

Correct the above SQL statement by adding ,CUSTOMER_ID in the second SQL statement. (Remember the number of columns in both the SQL statements should be the same.)

```
SELECT ORDER_ID, CUSTOMER_ID FROM SALES  
UNION ALL  
SELECT ORDER_ID, CUSTOMER_ID FROM SALES_HISTORY
```

- 2) You will get an error “ORA-01790: expression must have same datatype as corresponding expression” when you run below SQL statement.

```
SELECT SALES_DATE, ORDER_ID FROM SALES  
UNION ALL  
SELECT PRODUCT_ID, ORDER_ID FROM SALES
```

Correct the above SQL statement by replacing SALES_DATE with PRODUCT_ID in the first SQL statement or by replacing PRODUCT_ID with SALES_DATE in the second SQL statement (Remember the datatype of the columns in both the SQL statements should be the same.)

```
SELECT PRODUCT_ID, ORDER_ID FROM SALES
UNION ALL
SELECT PRODUCT_ID, ORDER_ID FROM SALES
```

```
SELECT SALES_DATE, ORDER_ID FROM SALES
UNION ALL
SELECT SALES_DATE, ORDER_ID FROM SALES
```