

Experiment No 6

Objectives: Write SQL Queries for Relational Algebra (UNION, INTERSECT and MINUS etc.)

UNION Example

The following statement combines the results with the UNION operator, which eliminates duplicate selected rows. This statement shows that you must match datatype (using the TO_CHAR function) when columns do not exist in one or the other table:

```
SELECT location_id, department_name "Department",  
TO_CHAR(NULL) "Warehouse" FROM departments  
UNION  
SELECT location_id, TO_CHAR(NULL) "Department", warehouse_name  
FROM warehouses;
```

| LOCATION_ID ----- | Department ----- | Warehouse ----- |
|----------------------|---------------------|--------------------|
| 1400 | IT | |
| 1400 | Southlake, Texas | |
| 1500 | Shipping | |
| 1500 | San Francisco | |
| 1600 | New Jersey | |
| 1700 | Accounting | |
| 1700 | Administration | |
| 1700 | Benefits | |
| 1700 | Construction | |

INTERSECT Example

The following statement combines the results with the INTERSECT operator, which returns only those rows returned by both queries:

```
SELECT product_id FROM inventories  
INTERSECT SELECT product_id FROM order_items;
```

MINUS Example

The following statement combines results with the MINUS operator, which returns only rows returned by the first query but not by the second:

```
SELECT product_id FROM inventories  
MINUS  
SELECT product_id FROM order_items;
```