Indexing and Sargable Query Challenges

1

First Challenge

Challenge:

Create a non-clustered index on the `location_id` column in the `oes.warehouses` table. Also, specify `warehouse_name` as a non-key included column.

2

Second Challenge

Challenge:

Create a `UNIQUE` **index on the** `product_name` **column in the** `oes.products` **table.**

Third Challenge

Challenge:

Rewrite the following query to make it sargable:

```sql
SELECT
  order_id,
  order_date
FROM oes.orders
WHERE YEAR(order_date) = 2019;
```

Fourth Challenge

Challenge:

Most queries against the `oes.orders` table are for unshipped orders i.e. orders where the `shipped_date` is null. Put an appropriate filtered index on the `shipped_date` column.

Fifth Challenge

Challenge:

Rewrite the following query to make it sargable and create an index which covers the query, once rewritten:

```sql
SELECT
 customer_id, first_name, last_name, email, street_address
FROM oes.customers
WHERE LEFT(first_name, 2) = 'Vi'
AND last_name = 'Jones';
```