

Create Two Sessions

1. Open SQL Server Management Studio, connect to your AdventureworksLT database, and open two query windows.
2. Arrange your query windows side-by-side so that you can see both of them. You can right click a query tab and click New Vertical Tab Group to achieve this.
3. Save the query on the left as Query A and save the query on the right as Query B.

Test the Read Uncommitted Isolation Level

1. In Query A, type and execute the following query:

```
BEGIN TRANSACTION
    UPDATE SalesLT.Product
    SET ListPrice= 11111
    WHERE ProductID= 680;
GO
```

2. In Query B, type and execute the following query:

```
SET TRANSACTION ISOLATION LEVEL READ UNCOMMITTED
GO
SELECT ProductID, ListPrice
FROM SalesLT.Product
WHERE ProductID= 680;
GO
```

3. Note that the updated ListPrice is displayed.
4. In Query A, type and execute the following query:

```
ROLLBACK;
GO
```

5. In Query B, type and execute the following query:

```
SELECT ProductID, ListPrice
FROM SalesLT.Product
WHERE ProductID= 680;
GO
```

6. Note that the updated ListPrice never actually existed.

Test the Read Committed Isolation Level

1. In Query A, type and execute the following query:

```
BEGIN TRANSACTION
    UPDATE SalesLT.Product
    SET ListPrice= 11111
    WHERE ProductID= 680;
GO
```

2. In Query B, type and execute the following query:

```
SET TRANSACTION ISOLATION LEVEL READ COMMITTED
GO
SELECT ProductID, ListPrice
FROM SalesLT.Product
WHERE ProductID= 680;
GO
```

3. Note that the original ListPrice is displayed.
4. In Query A, type and execute the following query:

```
ROLLBACK;
GO
```

5. Note that this is the default behavior in Azure. The default behavior in an on-premises system is to block the second transaction.

Test the Serializable Isolation Level

1. In Query A, type and execute the following query:

```
BEGIN TRANSACTION
    UPDATE SalesLT.Product
    SET ListPrice= 11111
    WHERE ProductID= 680;
GO
```

2. In Query B, type and execute the following query:

```
SET TRANSACTION ISOLATION LEVEL SERIALIZABLE
GO
SELECT ProductID, ListPrice
FROM SalesLT.Product
WHERE ProductID= 680;
GO
```

3. Note that the query is blocked.

4. In Query A, type and execute the following query:

```
ROLLBACK;  
GO
```

5. Note that Query B can now complete.