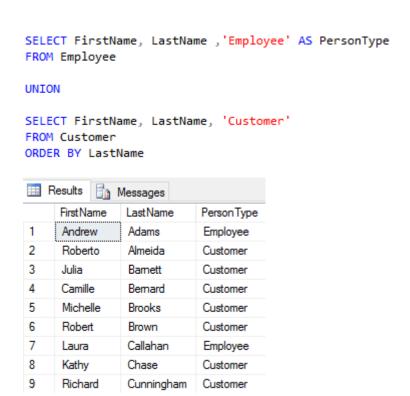
UNION, INTERSECT and EXCEPT



UNION Keyword

- The UNION keyword allows you to combine multiple datasets
- Datasets must have the same number of columns and similar datatypes
- The first data set defines the column names used in the result set
- If used, an ORDER BY clause must placed on the last dataset





UNION vs UNION ALL

- A UNION clause will suppress duplicate rows in the result set
- UNION ALL will leave the duplicate rows in the result set
- UNION ALL queries execute faster because they do not check for duplicate values

```
SELECT Name, Composer
FROM Track
WHERE Composer = 'Steve harris'
AND AlbumId = 99

UNION

SELECT Name, Composer
FROM Track
WHERE Composer = 'Steve harris'
AND AlbumId = 96

ORDER BY Name
```

Results Messages					
	Name	Composer			
1	Afraid To Shoot Strangers	Steve Hamis			
2	Childhood's End	Steve Hamis			
3	Fear Of The Dark	Steve Harris			
4	From Here To Etemity	Steve Harris			
5	Heaven Can Wait	Steve Harris			
6	The Clairvoyant	Steve Harris			
7	The Fugitive	Steve Harris			

```
SELECT Name, Composer
FROM Track
WHERE Composer = 'Steve harris'
   AND AlbumId = 99

UNION ALL

SELECT Name, Composer
FROM Track
WHERE Composer = 'Steve harris'
   AND AlbumId = 96

ORDER BY Name
```

⊞ F	Results 🚹 Messages	
	Name	Composer
1	Afraid To Shoot Strangers	Steve Hamis
2	Afraid To Shoot Strangers	Steve Hamis
3	Childhood's End	Steve Harris
4	Fear Of The Dark	Steve Harris
5	Fear Of The Dark	Steve Harris
6	From Here To Etemity	Steve Harris
7	From Here To Etemity	Steve Harris
8	Heaven Can Wait	Steve Hamis
9	The Clairvoyant	Steve Hamis
10	The Fugitive	Steve Harris



INTERSECT Keyword

3

- The INTERSECT keyword returns distinct rows that are found in both datasets
- The rows returned would be duplicates in a result set with the UNION ALL keywords
- Only two datasets can be compared

```
SELECT Name, Composer
FROM Track
WHERE Composer = 'Steve harris'
    AND AlbumId = 99
INTERSECT
SELECT Name, Composer
FROM Track
WHERE Composer = 'Steve harris'
    AND AlbumId = 96
ORDER BY Name
Results
            Messages
      Name
                               Composer
      Afraid To Shoot Strangers
                               Steve Harris
       Fear Of The Dark
                                Steve Harris
```

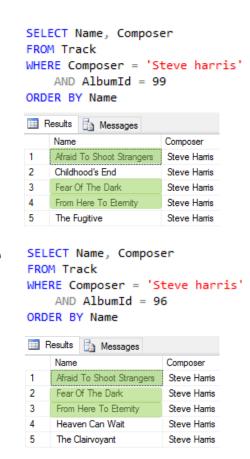
From Here To Etemity

Steve Harris



EXCEPT Keyword

- The EXCEPT keyword returns rows from the first dataset that are not found in the second dataset
- Only two datasets can be compared



```
SELECT Name, Composer
FROM Track
WHERE Composer = 'Steve harris'
    AND AlbumId = 99
EXCEPT
SELECT Name, Composer
FROM Track
WHERE Composer = 'Steve harris'
    AND AlbumId = 96
ORDER BY Name
           Messages
Results
     Name
                    Composer
      Childhood's End
                    Steve Hamis
      The Fugitive
                    Steve Harris
```