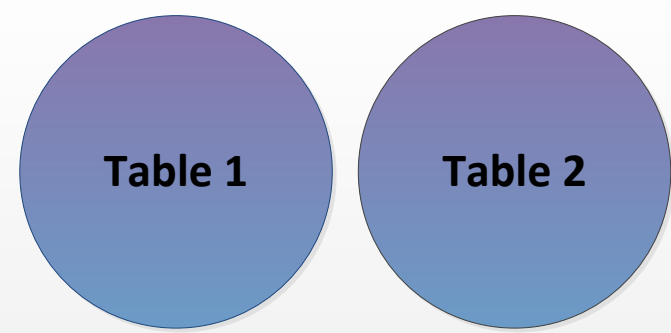


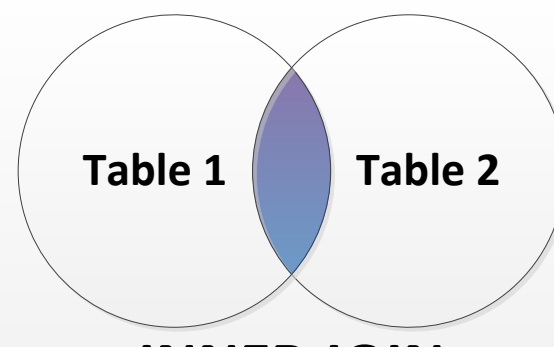
MySQL JOIN Types

Created by Steve Stedman



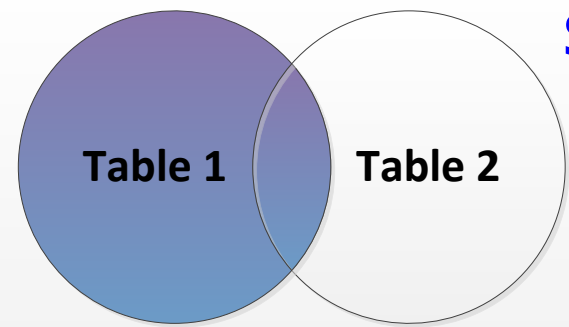
SELECT from two tables

```
SELECT *  
FROM Table1;  
  
SELECT *  
FROM Table2;
```



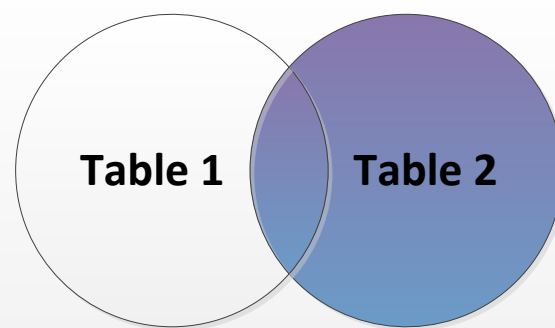
INNER JOIN

```
SELECT *  
FROM Table1 t1  
INNER JOIN Table2 t2  
ON t1.fk = t2.id;
```



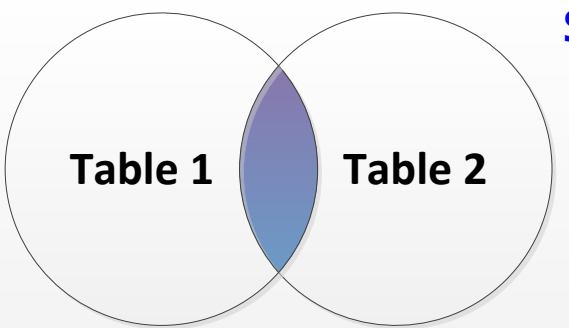
LEFT OUTER JOIN

```
SELECT *  
FROM Table1 t1  
LEFT OUTER JOIN Table2 t2  
ON t1.fk = t2.id;
```



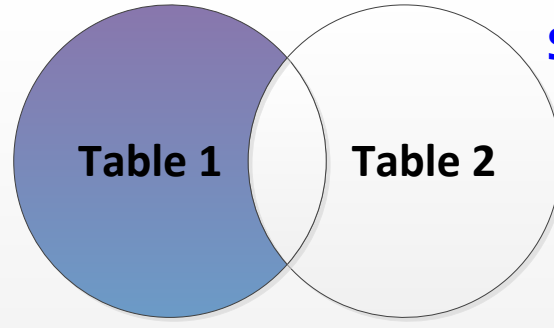
RIGHT OUTER JOIN

```
SELECT *  
FROM Table1 t1  
RIGHT OUTER JOIN Table2 t2  
ON t1.fk = t2.id;
```



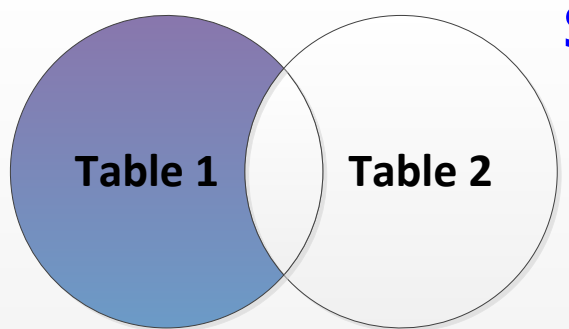
SEMI JOIN – Similar to INNER JOIN, with less duplication.

```
SELECT *  
FROM Table1 t1  
WHERE EXISTS (SELECT 1  
              FROM Table2 t2  
              WHERE t1.fk = t2.id  
             );
```



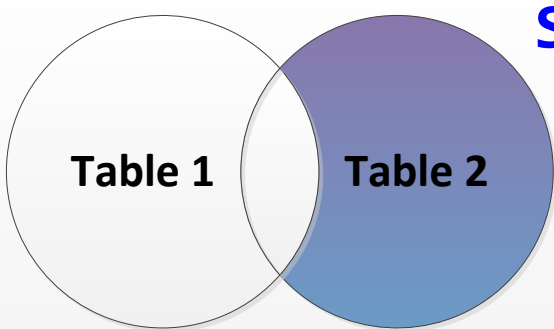
ANTI SEMI JOIN

```
SELECT *  
FROM Table1 t1  
WHERE NOT EXISTS (SELECT 1  
                  FROM Table2 t2  
                  WHERE t1.fk = t2.id  
                 );
```



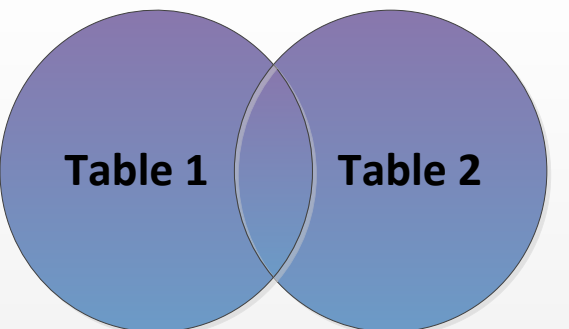
LEFT OUTER JOIN with exclusion

```
SELECT *  
FROM Table1 t1  
LEFT OUTER JOIN Table2 t2  
ON t1.fk = t2.id  
WHERE t2.id IS NULL;
```



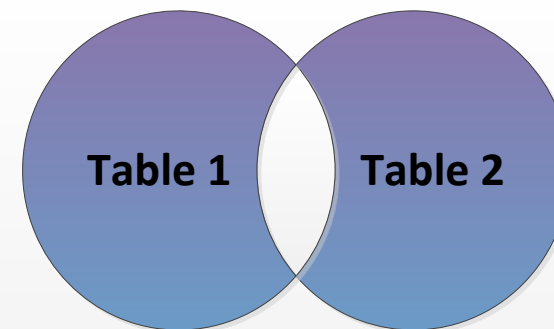
RIGHT OUTER JOIN with exclusion

```
SELECT *  
FROM Table1 t1  
RIGHT OUTER JOIN Table2 t2  
ON t1.fk = t2.id  
WHERE t1.fk IS NULL;
```



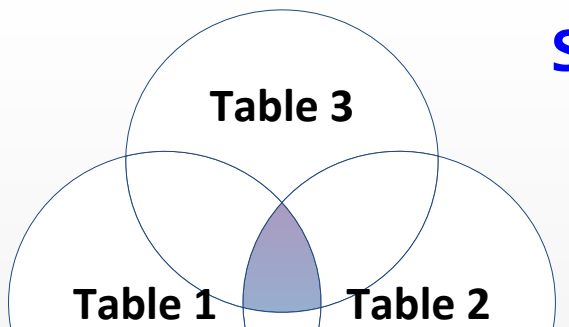
FULL OUTER JOIN

```
SELECT * FROM Table1 t1  
LEFT OUTER JOIN Table2 t2  
ON t1.fk = t2.id  
UNION  
SELECT * FROM Table1 t1  
RIGHT OUTER JOIN Table2 t2  
ON t1.fk = t2.id;
```



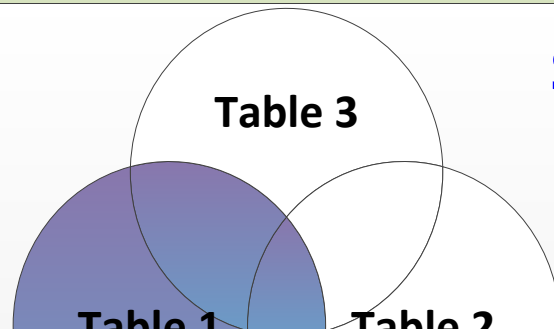
FULL OUTER JOIN with exclusion

```
SELECT * FROM Table1 t1  
LEFT OUTER JOIN Table2 t2  
ON t1.fk = t2.id  
WHERE t2.id IS NOT NULL  
UNION  
SELECT * FROM Table1 t1  
RIGHT OUTER JOIN Table2 t2  
ON t1.fk = t2.id  
WHERE t1.fk IS NOT NULL;
```



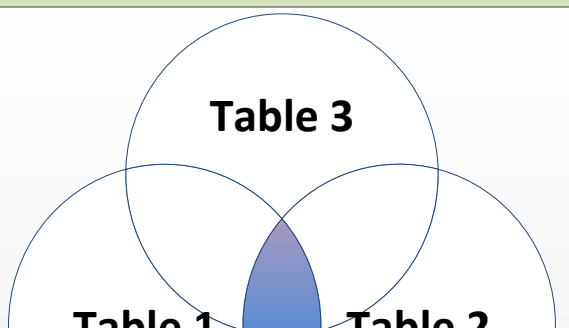
Two INNER JOINS

```
SELECT *  
FROM Table1 t1  
INNER JOIN Table2 t2  
ON t1.fk = t2.id  
INNER JOIN Table3 t3  
ON t1.fk_table3 = t3.id;
```



Two LEFT OUTER JOINS

```
SELECT *  
FROM Table1 t1  
LEFT OUTER JOIN Table2 t2  
ON t1.fk = t2.id  
LEFT OUTER JOIN Table3 t3  
ON t1.fk_table3 = t3.id;
```



INNER JOIN and a LEFT OUTER JOIN

```
SELECT *  
FROM Table1 t1  
INNER JOIN Table2 t2  
ON t1.fk = t2.id  
LEFT OUTER JOIN Table3 t3  
ON t1.fk_table3 = t3.id;
```