

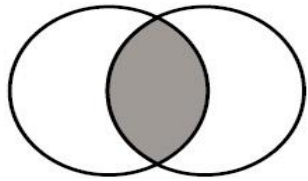
Selecting Data from More Than One Table By Using Joins

There are two types of joins:

- Inner Joins return a result table for all the rows in a table that have one or more matching rows in the other table that is listed in the FROM clause.
- Outer Joins are inner joins that are augmented with rows that did not match with any row from the other table in the join. There are three types of outer joins: left, right, and full.



Inner Join:



An inner join returns only the subset of rows from the first table that matches rows from the second table. You can specify the columns that you want to be compared for matching values in a WHERE clause.

```
proc sql;  
  title 'Table One and Table Two';  
  select * from one, two  
    where one.x=two.x;  
Quit;
```



Creating Inner Joins Using INNER JOIN Keywords

The INNER JOIN keywords can be used to join tables. The ON clause replaces the WHERE clause for specifying columns to join. PROC SQL provides these keywords primarily for compatibility with the other joins (OUTER, RIGHT, and LEFT JOIN). Using INNER JOIN with an ON clause provides the same functionality as listing tables in the FROM clause and specifying join columns with a WHERE clause.

```
proc sql ;  
    select p.country, barrelsperday 'Production', barrels 'Reserves'  
    from sql.oilprod p inner join sql.oilrsrvs r  
        on p.country = r.country;  
quit;
```

