Relational Algebra Operators

* Set union
  \[ \text{UNION} \]

* Set difference
  \[ \text{INTERSECT} \]

* Set intersection
  \[ \text{SELECT} \]

* Projection
  \[ \text{PROJECT} \]

* Selection
  \[ \text{SELECTION} \]

* Rename
  \[ \text{T}_{i} (A_{1}, \ldots, A_{n}) = R \]

* Cartesian product
  \[ \text{x} \]

* Join
  \[ \text{JOIN} \]

* Natural Join
  \[ \ast \]
<table>
<thead>
<tr>
<th>ShowName</th>
<th>Start Year</th>
<th>Creator</th>
<th>Streaming Site(s)</th>
<th>Show Seasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Wire</td>
<td>2002</td>
<td>Sun</td>
<td>HBO</td>
<td>1-5</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>Stabler</td>
<td>Netflix, hulu.com</td>
<td>1-5</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>Simo</td>
<td>Prime, hulu.com</td>
<td>1-5</td>
</tr>
<tr>
<td>Jeopardy</td>
<td>1980</td>
<td>A</td>
<td>Netflix, hulu.com</td>
<td>1-10</td>
</tr>
</tbody>
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