Iteration 1

Diagram:

- Nodes: A, B, C, D, E, F, G, H
- Edges and Weights:
  - A to B: 2
  - B to D: 1
  - D to G: 7
  - A to E: 8
  - E to G: 3
  - C to E: 9
  - C to F: 6
  - F to C: 5

Table:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>∞</td>
<td>1</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>7</td>
<td>∞</td>
</tr>
<tr>
<td>F</td>
<td>D</td>
<td>D</td>
<td></td>
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</tbody>
</table>
Iteration 2

We have a priority queue based on CI1

\[ \begin{array}{cccccccc}
& A & B & C & D & E & F & G & H \\
C & 2 & 1 & \infty & \infty & 10 & \infty & 7 & \infty \\
F & B & D & & B & D & & & \\
\end{array} \]
Iteration 3

We have a priority queue based on CII

<table>
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<th></th>
<th>A</th>
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<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
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</thead>
<tbody>
<tr>
<td>C</td>
<td>2</td>
<td>1</td>
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<td>∞</td>
<td>8</td>
<td>10</td>
<td>∞</td>
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<tr>
<td>F</td>
<td>B</td>
<td>D</td>
<td>A</td>
<td>X</td>
<td>D</td>
<td>A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Kruskal

Can't use AC
Would create cycle
or
GF another cycle
or
AC

Checking for cycles
UNION/FIND