

Test Cases

Grid (Original Array) :

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Original
[0, 0, 1, 0, 0]
[0, 1, 0, 0, 1]
[1, 0, 0, 1, 0]
[0, 1, 0, 1, 1]
```

Case	Function	Expected	Output	Passed?
1	group_connections() grid: Original Grid	<pre>[2, 2, 1, 3, 3] [2, 1, 3, 3, 1] [1, 3, 3, 1, 4] [5, 1, 3, 1, 1]</pre>	<pre>Group Connection [2, 2, 1, 3, 3] [2, 1, 3, 3, 1] [1, 3, 3, 1, 4] [5, 1, 3, 1, 1]</pre>	Yes
2	Merge_groups() grid: Merged Grid group1: 2 group2: 4	<pre>[2, 2, 1, 3, 3] [2, 1, 3, 3, 1] [1, 3, 3, 1, 4] [5, 1, 3, 1, 1]</pre>	<pre>Merge Grouped Connection 2,4 [2, 2, 1, 3, 3] [2, 1, 3, 3, 1] [1, 3, 3, 1, 4] [5, 1, 3, 1, 1]</pre>	Yes
3	merge_groups() grid: Merged Grid group1: 3 group2: 5	<pre>[2, 2, 1, 6, 6] [2, 1, 6, 6, 1] [1, 6, 6, 1, 4] [6, 6, 6, 1, 1]</pre>	<pre>Merge Grouped Connection 3,5 [2, 2, 1, 6, 6] [2, 1, 6, 6, 1] [1, 6, 6, 1, 4] [6, 6, 6, 1, 1]</pre>	Yes
4	merge_groups() grid: Merged Grid group1: 2 group2: 5	<pre>[6, 6, 1, 3, 3] [6, 1, 3, 3, 1] [6, 3, 3, 1, 4] [6, 1, 3, 1, 1]</pre>	<pre>Merge Grouped Connection 2,5 [6, 6, 1, 3, 3] [6, 1, 3, 3, 1] [6, 3, 3, 1, 4] [6, 1, 3, 1, 1]</pre>	Yes

5	merge_groups() grid: Merged Grid(2,5) group1: 2 group2: 6	<pre>[7, 7, 7, 7, 7] [7, 7, 7, 7, 1] [7, 7, 7, 7, 4] [7, 7, 7, 1, 1]</pre>	<pre>Merge Grouped Connection 3,6 from 2,5 merged grid [7, 7, 7, 7, 7] [7, 7, 7, 7, 1] [7, 7, 7, 1, 4] [7, 7, 7, 1, 1]</pre>	Yes
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