NOTES:

- We arbitrarily assume the existence of unique numerical IDs for carTypes, articles and sellers. Alternatively we could have (make, year, model) be the key for carTypes, but IDs are a simpler solution, that allows for more efficient implementation of the connecting relationships too.
- Our design doesn't allow for stating all the different colors a carType comes in. We can only discover that a car/model comes in a specific color only if a vehicle of that color is on sale. If we needed to maintain such information, we could have created another entity set named Color and set a many-to-many relationship with carTypes (the 'comes in' relationship) and a one-to-many relationship with VehiclesOnSale (the 'isOfColor' relationship).
- The same comment applies to body style.
3. The following two tables represent different relation sets for the three-way relation between A, B and C. Obviously they are different (top table contains tuples with even number of 1s, bottom table contains tuples with odd number of 1s).

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
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<tr>
<td>0</td>
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<td>1</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
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</tr>
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<tbody>
<tr>
<td>1</td>
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<td>1</td>
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</tr>
</tbody>
</table>

The above two relationship sets are projected in both cases to exactly the same three relationship sets representing the three binary relations A-B, B-C, A-C. Notice that relationship sets are indeed sets of tuples, so it doesn’t matter if we change the order we present them in the tables! Here’s for example A-B, B-C and A-C are exactly the same.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>1</td>
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