SQL PROBLEMS: SOLUTIONS

Problem 1. Show the average position that an author appears on a book if the author has written more than one book. You may list the author using the ssn column.

```
SELECT ssn, AVG(author_order), COUNT(ssn)
FROM  bookauthor
GROUP BY ssn
HAVING count(ssn) > 1;
```

Problem 2. List the number of books that have the same publisher id and price where the price is known

```
SELECT pub_id, price, count(*)
FROM book
WHERE price IS NOT NULL
GROUP BY pub_id, price
HAVING count(*) > 1;
```

Problem 3. Display a list of the authors by the city they live in as long as they don't live in Maryland or Illinois sort the list by last name within city. (Use a subquery)

```
SELECT lastname, firstname, state
FROM author
WHERE city NOT IN
  (SELECT city
   FROM author
   WHERE state IN ('MD', 'IL')
 );
```

Problem 4. Show a list of all authors and the books they have written. Except don't show any authors whose last name has the letter 'a' or 'o' in it.

```
SELECT lastname, firstname, title
FROM author
    JOIN bookauthor USING(ssn)
    JOIN book USING(isbn)
WHERE NOT (lastname LIKE '%a%' or lastname LIKE '%o%')
ORDER BY 1,2,3;
```

Problem 5. List the authors (using their last and first names) who have written books published by the publisher whose name begins with 'Bin'.

```
SELECT lastname, firstname, title, name
FROM author
    JOIN bookauthor USING(ssn)
    JOIN book USING(isbn)
    JOIN publisher USING(pub_id)
WHERE name LIKE ('Bin%')
ORDER BY 1,2,3;
```