Complete this exercise in pairs. Talk about your thoughts and write only one response. Write your answers on this page and submit before the end of class. Only one submission per pair needed.

1) For the exercise, you were asked to write the predicate leftIsClear. The code on the left is similar to how we did rightIsBlocked in class, while the code on the right is closer to how the book does it.

```java
public boolean leftIsClear()
{
    turnLeft();
    if (frontIsClear())
    {
        turnRight();
        return true;
    }
    else
    {
        turnRight();
        return false;
    }
}
```

```java
public boolean leftIsClear()
{
    turnLeft();
    if (frontIsClear())
    {
        turnRight();
        return true;
    }
    turnRight();
    return false;
}
```

Do these two methods have the same behavior? (In other words, are they Execution Equivalent?) Explain your answer.

2) A friend of mine has been prescribed a new medication. This medication is to be taken one dose every 4 hours. In a given 12 hour period, this friend takes 4 doses of the medication. Should I be concerned that the friend is over-medicating? Why or why not? How does this relate to something we have seen in this course?
3) For this question, we will consider on-line travel sites. In particular, using one to get airplane reservations. Typically, you tell the site where you are starting and where you want to go. Then, the site will give you a listing of possible flights.

For instance, we might say that we want to fly to New Orleans for Mardi Gras, leaving from Greensboro. The site might give us these options:

<table>
<thead>
<tr>
<th>Option 1:</th>
<th>Option 2:</th>
<th>Option 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greensboro-&gt;Philadelphia</td>
<td>Greensboro-&gt;Charlotte</td>
<td>Greensboro-&gt;Washington Dulles</td>
</tr>
<tr>
<td>Change planes</td>
<td>Change planes</td>
<td>Change planes</td>
</tr>
<tr>
<td>Philadelphia-&gt;Dallas</td>
<td>Charlotte-&gt;New Orleans</td>
<td>Washington Dulles-&gt; Chicago</td>
</tr>
<tr>
<td>Change planes</td>
<td></td>
<td>Change planes</td>
</tr>
<tr>
<td>Dallas-&gt;New Orleans</td>
<td></td>
<td>Chicago-&gt;St Louis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change planes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>St Louis-&gt;New Orleans</td>
</tr>
</tbody>
</table>

Often, there may be dozens of options, including different times of day. The flights will often be listed by “number of stops” (the number of times you have to change planes) or “number of hops” (the number of actual flights you take). For example, Option 1 above is 3 “hops”, but 2 “stops”.

a) Go to Travelocity.com and try typing in something like this to see what it looks like. If you have not done something like this before, you may need to experiment or ask peers in the room.

Does Travelocity report the number of stops or the number of hops? Why do you think it reports that rather than the other one? Do you think customers care more about one vs the other?

b) Many sites will allow us to sort the listing of flights by various things. For instance, sort the list by departure time; sort the list by price; sort the list by number of stops.

Should there also be an option to sort the list by number of hops in addition to sorting the list by number of stops? Why or why not?