

Problem #1

```
public boolean cigarParty(int cigars, boolean isWeekend) {  
    return isWeekend ? cigars >= 40 : (cigars >= 40 && cigars <= 60);  
}
```

Problem #2

```
public boolean lessBy10(int a, int b, int c) {  
    return Math.abs(a - b) >= 10 ? true : Math.abs(b - c) >= 10 ? true :  
    Math.abs(a - c) >= 10 ? true : false;  
}
```

The first problem was really straightforward, it would return true if the cigars were between 40 and 60 unless isWeekend was true in this case true was only returned if cigars were more than 40, with no upper limit.

Although this problem was equally as straightforward, all I had to do was compare all values to each other, and if the difference was 10 or greater than 10 return true it took a bit longer because I had to figure out how to use the negative number that could sometimes appear when getting the difference that's when I remembered that I could get the absolute difference of these values, that would always be a positive number, now I had to figure out how to get absolute numbers in java after some research, I found this link.

[Java Math abs\(\) method with Examples - GeeksforGeeks](#)

I found out that java has an absolute method in its math class, after finding this it was easy to just write the rest of my code and test it.