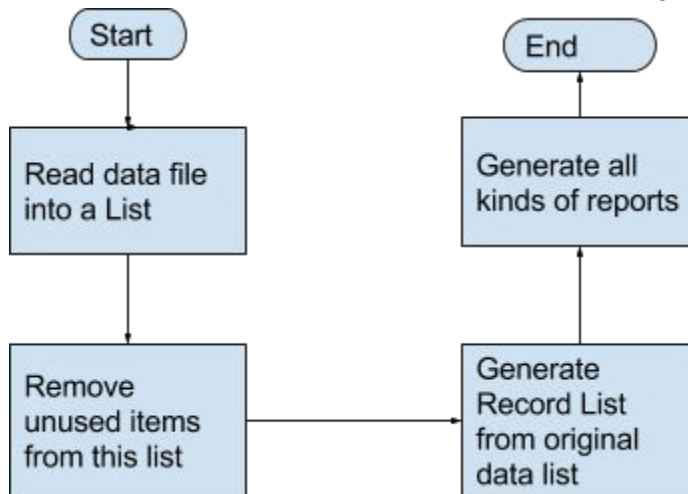***Why I choose this problem?***
Both of these two code challenges are quite interesting, the vehicle question seems quite practical and I think I could show more design and coding skills better I choose this solution.
Simple design
  ❖ There are 3 main classes in this part:
    ➢ VehicleRecord: This class represents a record by a sensor. It stands for the time, sensor name, date(one numbers starting from 1) when a car passes a sensor.
    ➢ AconexDataParserUtil: This util class is used to read file and convert file lines into Record object.
    ➢ AconexReportUtil: This util class is used to generate all kinds of reports.

```
  Start                          End

Read data file              Generate all
into a List                 kinds of reports

Remove                      Generate
unused items                Record List
from this list              from original
                            data list
```

How to make it run?
The code is written in Java 8. So a eclipse with java 8 should be installed.
The default Main class with well with default file without modification.
If there is need to make it work with other data file, just modify

  1. Unzip the file AconexVehicleProject.zip.
  2. Use eclipse to open this project.
  3. Open 'Main.java':
        a. The default Main class with well with default file without modification.
        b. If there is need to make it work with other data file, just modify value of "filePath"

```java
 * @author jason.zhang
 */
public class Main {

    public static void main(String[] args) {
        // TODO replace the filePath with a real file path(including file name), for example '/home/jason/Vehicle.txt'
        String filePath = "src/main/resources/VehicleSurveyCodingChallengeSampleData.txt";
        File file = new File(filePath);

        try {
            List<String> lines = AconexDataParserUtil.readFile(file);
```

  4. Run the Main class, and all results will be shown in console.