

# Homework Assignment

## Overview:

You are asked to create a program in Scala that will consume REST endpoints, munge JSON data and output results. The API you will be working with is a publicly available REST API from the U.S. Food and Drug Administration related to Recall Enforcement Report data

Endpoint Documentation:

<https://open.fda.gov/apis/food/enforcement/>

## Criteria

Your program should output to the terminal the following:

1. A list of top 10 "Class III" health hazard classification alerts, grouped by state and further by status
2. A line stating the average number of reports per month in 2016
3. A list of the top 10 states and the number of reports each had in 2017
4. The year with the most and fewest reports across all states

## Example of Output

```
1. Top States with Class III Hazard
State CA/Status Terminated: 164
State TX/Status Terminated: 130
State IA/Status Terminated: 115
State WA/Status Terminated: 100
State MA/Status Terminated: 86
State NY/Status Terminated: 71
State NJ/Status Terminated: 50
State OR/Status Terminated: 32
State UT/Status Terminated: 28
State FL/Status Terminated: 27
---
```

2. Average reports per month in 2016  
251 reports

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3. Top States for 2017

IL: 468

CA: 293

FL: 245

NY: 227

NH: 210

PA: 188

WA: 156

TX: 143

MA: 134

OH: 123

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4. Top Years

Highest year is 2017 with 3206 reports

Lowest year is 2004 with 0 reports

## How to Submit Your Code

When you are done with the program, either

1. Share a private github repo that has the code with `sasha-fedtsov` and `linciitizen` (give admin privileges so we can share it with other team members in Invitae)
2. OR send a zip file with the whole project to [alexandre.fedtsov@invitae.com](mailto:alexandre.fedtsov@invitae.com) **and** `lin.wan@invitae.com`