The Dataset - US Accident Data

Key	Type	Description
Severity	integer	Severity of the accident (between 1 - 4)
Start_Time	datetime	Start time of accident in local time zone
Start_Lat	float	Latitude as GPS coordinate of the start point
Start_Lng	float	Longitude as GPS coordinate of the start point
Description	string	Natural language description of the accident
Visibility(mi)	float	Visibility (in miles) during the accident
Precipitation(in)	float	Precipitation amount in inches, if there is any
Weather_Condition	string	Weather condition during the accident - rain, snow, thunderstorm, fog, etc
Sunrise_Sunset	String	Shows the period of day (i.e. day or night) during the accident

Problem Statement

Find record count per hour

Description

Find the number of accidents occuring per hour that satisfy a set of conditions and display them in sorted fashion.

All the following conditions must be satisfied by a record.

Attribute	Condition
Description	Accident should result in either a “lane blocked”, “shoulder blocked” or an “overturned vehicle”
Severity	>= 2
Sunrise_Sunset	Night
Visibility(mi)	<= 10
Precipitation(in)	>= 0.2 inches
Weather_Condition	Should either be "Heavy Snow", "Thunderstorm", "Heavy Rain", "Heavy Rain Showers" or "Blowing Dust"

Comments

Ignore records which do not satisfy the mentioned conditions. You do not require any command line arguments for this task. Additionally, if any of the required attributes contain `NaN`, ignore the record.

Recommended module:
`datetime`

Output Format

For each hour that contains accident data that satisfies the provided conditions, print the hour followed by the number of accidents in that hour on a separate line. For hours that do not contain any accident records, do not print anything.

Example, here is the sample output for the 5% dataset split

```
3 1
4 1
5 4
6 4
7 1
18 1
19 2
20 1
21 3
22 1
23 1
```