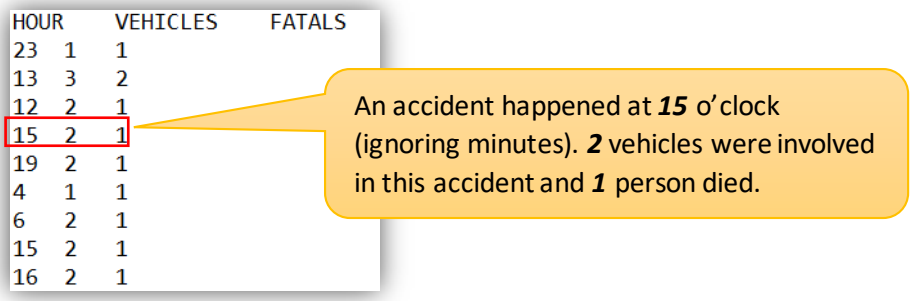
# Homework Assignment 3: Accidents.java

## Due: Sunday, October 31th, 2020

## Submission: Submit Accidents.java to Blackboard

The attached file is the data of fatal traffic accidents. Each accident is recorded in one row and the first column is the time (hour, in 24-hour format) the accident happened, the second column is the number of vehicles involved in that accident, and the last column is the number of fatality (i.e., the number of persons who died) in that accident.




Write a Java program to show the **number of accidents**, **number of vehicles** involved, **number of fatals**, and **vehicle to accidents ratio** in the following three time spans:

- **Morning**: hours from 6 to 12, inclusively
- **Afternoon**: hours from 13 to 19, inclusively
- **Night**: hours from 0 to 5, and 20 to 23, inclusively

Also determine which time span has the **highest** vehicle to accidents ratio.

Simulate the following output. The text can be different but the numerical values should be the same.

```
Time Span    Accidents  Vehicles    Fatals      Veh./Acc.
-------------------------------------------------------------
Morning           8524     14294      9349         1.6769
Afternoon        13028     21379     14380         1.6410
Night            15350     21181     16955         1.3799
-------------------------------------------------------------
The morning time has the highest vihecle to accident ratio
which means more vihecles are involved in each accident
in the morning than in any other time spans.
```

Add more analysis if you want.

***Note***:

1. The "morning" in the last message should be a decision made by the program (i.e., there should be an if-else structure to compare the Vehicle/Accident ratio in different time span and made the decision).
2. The HOUR column contains a default value 99 which stands for UNKNOWN. Make sure you set up the time span condition strictly.
3. Example flowchart: