You are given a data file with traffic light information.

EXAMPLE:

*Red,Yellow,Green,TimeActive,Time*

*1,0,0,7,0:0:7*

*0,1,0,7,0:0:14*

*0,0,1,9,0:0:23*

*0,1,0,1,0:0:24*

*1,0,0,1,0:0:25*

The first row indicates what information is in each column. Columns are separated by a comma. For example, the first line: 1,0,0,7,0:0:7 means that

*Red: 1*

*Yellow: 0*

*Green: 0*

*TimeActive: 7*

*Time: 00:00:07*

or in other words, the red light was ON for 7 seconds at 0:00:07 o'clock.

Complete at least two of the following tasks:

1. Find the number of red, yellow & green occurrences.

From the example above: Red=2, Yellow=2, Green=1

1. Find how long each colour was active for.

From the example above: Red=8 seconds, Yellow=8 seconds, Green=9 seconds

1. Find all times when Green was active (by time)

From the example above: [0:00:23]

1. Find the number of complete cycles Red-Yellow-Green-Yellow-Red in the data

From the example above: 1

1. Find number of lines with mistakes (multiple colours active at the same time or no colours active)

From the example above: 0