National Lottery API

Your company has recently won the tender for European national lotteries. There are currently 30 independent national lotteries in Europe.

National lotteries run once a week and the results of ALL the lotteries need to run through your company.

**Process:**

All national lotteries are required to upload (SFTP) a csv file with all ticket entries to your server. The files will contain the tickets that have been entered into their draw.

All national lotteries are required to upload a second file, containing the winning numbers.

Your process can assume that the SFTP is done.

Example file names of the ticket uploads

germany\_03-11-2019\_32322.csv

italy\_03-11-2019\_32322.csv

norway\_06-11-2019\_87685.csv

$country\_$drawdate\_$drawnumber.csv

Example file names of the result uploads

germany\_03-11-2019\_32322\_result.csv

italy\_03-11-2019\_32322\_result.csv

norway\_06-11-2019\_87685\_result.csv

$country\_$drawdate\_$drawnumber\_result.csv

**Requirement**

Your process should be a standalone program that will run via the command line.

The process should:

* Locate the uploaded files
* Result the tickets by comparing the entered tickets to the winning numbers.
* Produce a result file that contains the following information
  + Count of matched numbers (Main ball set)
  + Count of matched numbers (Any additional ball sets)
  + If a Ticket has matched all numbers, indicate that the jackpot was won

Important notes :

* I have provided examples of 3 national lottery entry and result files.
* Every Lottery File could and normally do have different ball sets.
* For the purpose of this exercise, the ball sets for the countries will be:
  + Germany
    - Main ball set: 5 numbers drawn from a possible 59
    - Second ball set: 1 number drawn from a possible 20
  + Italy
    - Main ball set: 6 numbers drawn from a possible 70
    - Second ball set: 1 number drawn from a possible 15
  + Norway
    - Main ball set: 4 numbers drawn from a possible 30
    - Second ball set: 1 number drawn from a possible 10
    - Third ball set: 1 number drawn from a possible 5

Main Considerations:

Ball sets are usually different for across lotteries

Ball sets may occasionally change. Example:

* A ball set may change from 6-of-49 to 6-of-50
* Additional bonus ball sets may be added or removed

Files may be extremely large, so results may need to be processed in parallel.