We will be developing a really simple class representation of Azure Data Factory ETL tool.

Pay attention to the way sour ce, sink, dataset entities exist in Data Factory.

Please use pandas for all data loading tasks. [JSON file for testing](https://alearnbg.adastragrp.com/pluginfile.php/63071/mod_page/content/2/users_1k.json)

Create the following classes:

* Dataset – abstract class with methods
  + preview()
  + show\_schema()
  + get\_data()
  + write\_data()
* JSONDataset – inherits from Dataset and implements its methods
* CSVDataset – inherits from Dataset and implements its methods
* Source – has ‘Dataset’ as a property
* Sink – has ‘Dataset’ as a property
* Activity – abstract class with methods
  + start()
* WaitActivity – inherits from Activity
  + Implements start() – start accepts time\_in\_seconds and sleeps the program for the number of seconds
* CopyActivity – inherits from Activity
  + Implements start() – start copies the data from the source to the sink
* Pipeline – has activities list of type Activity as a property and methods
  + add\_activity() – adds an activity to the pipeline
  + execute() – iterates through the activities and executes them in order

Example of execution:

