

Task description

In the attached archive, there are two specific types of CSV files – so-called "LP" and "TOU" files.

Write a console program that will:

1. Read CSV files, set the file path configurable so the program can read any "LP" and "TOU" files;
2. For each file, calculate the median value using a) the "Data Value" column for the "LP" file type or b) or the "Energy" column for the "TOU" file type;
3. Find values that are 20% above or below the median, and print to the console using the following format:

{file name} {datetime} {value} {median value}

Note: to get {datetime} use "Date/Time" column in a csv file (for both file types).

What we would like to see in your solution:

1. Appropriate object-oriented approach.
2. Use of modern patterns like IoC and DI.
3. Clear, decoupled, appropriate idiomatic code. Ideally, we would like to deploy the application as Microservices to scale out the processes horizontally.
4. Unit tests so we can include it as a part of the CI/CD pipeline.