This exercise is designed to take a few hours, but there is no hard time limit – please do not feel rushed. Also, questions are welcome, so feel free to ask.

Requirements

Write an application that takes a log file as input (sample will be provided) and creates a tsv file containing histogram bins of forecasted high temperatures of the locations discovered in the input log. Use Imperial units and the next calendar day's forecast for values.

Example command:

```
.\CreateWeatherHistogram.exe <input file> <output file> <histogram buckets>
```

Example tsv content with a bucket count of 5:

bucketMin	bucketMax	count
0	16.2	47
16.2	32.4	191
32.4	48.6	1586
48.6	64.8	416
64.8	81	1161

Use freely available data sources, web API's, and/or downloadable databases to find forecasted weather information for each row in the provided log.

Write a failure summary to the console for rows that could not be included in the histogram. Include reasons (missing data, API lookup failures, etc.) along with counts/percentages for each failure type.

Implementation

This application may be written in any language.

Write your code with the quality bar you would use for production code.

Submit your response as a .zip of a Visual Studio solution (if you're not using C#, as a .zip of your sources with a readme on how to compile and run).

IMPORTANT: Be sure to scrub your submission of any binaries or executable files (e.g. *.exe, *.dll, *.bat, etc.). Our email filter is very sensitive and may silently delete emails with archive attachments containing these file types.