

TASK

There is a file which contains temperatures in Celsius or Fahrenheit for given cities and dates. The strings representing temperatures are expected to look like this: 10F or -15 C. The date/time strings are expected to conform to ISO 8601.

Write a Python program which:

- asks the user for the name of the input file
- asks the user for the name of the output file
- reads all records from the input file
- converts each temperature to Fahrenheit if it is in Celsius
- converts all dates to the local timezone
- writes the converted values in the output file

The input files can be either CSV or JSON array (see the examples below). The output can also be either CSV or JSON array depending on the file extension of output file name.

Your solution should be provided as a single ZIP archive of:

- source code incl. unit tests
- code coverage information (<https://coverage.readthedocs.io>)
- requirements.txt for pip if needed
- brief documentation if needed (readme.md) - e.g. how to run the code
- anything else you consider important

SAMPLE CSV

```
Sofia, 2021-08-01T13:00:00+02:00, 33C
Varna, 2021-08-01T11:45:00Z, 25 C
```

SAMPLE JSON

```
[
  {
    "city": "Sofia",
    "date": "2021-08-01T13:00:00+02:00",
    "temp": "33C"
  },
  {
    "city": "Varna",
    "date": "2021-08-01T11:45:00Z",
    "temp": "25 C"
  }
]
```

SAMPLE OUTPUT CSV

```
Sofia,2021-08-01 14:00:00+03:00,91F
Varna,2021-08-01 14:45:00+03:00,77F
```