## Instructions

We'd like to see an example of your code, and we'll primarily look for the following in our assessment:

- Readability and code structure.
- Minimalism: there's no need to reinvent the wheel or build new algorithms. The more straightforward your solution is, the better.
- It should work: please, provide brief instructions on how to run your code (*requirements.txt*, etc. if needed).
- Correctness: the final numbers should be (approximately) correct, see below for more details.

Please, implement your solution in Python. We estimate that a good implementation can take around 1.5 hours, but this is not a race – you can decide whether you want to take more time.

Reach out to <a href="mailto:hiring@everstores.com">hiring@everstores.com</a> if you have any questions. Good luck!

## Task

We'd like you to use the attached <u>transactions.csv</u> file to implement an inflation-adjusting currency converter.

The file contains purchase transactions from customers in 3 different countries (Germany, USA, UK). Each row represents a single transaction and contains the corresponding country code, currency, amount, and processing timestamp. Your task is to compute the **inflation-adjusted total yearly revenue in USD** for each country (for the given task, total revenue = sum of all transactions).

To compute the final numbers, please 1. convert all currencies into USD, and 2. adjust the USD amounts to account for historical inflation. Below are additional remarks for each step:

- Currency conversion happens based on the ForEx rates at the processing timestamp (i.e. happens instantly and precisely at the processing timestamp). For simplicity, you can assume a fixed daily exchange rate (average rate over the transaction date or other reasonable approximation) – daily rates provide a sufficiently accurate approximation for this task.
- 2. The final numbers have to be expressed in the "current US dollars" this means that historic values need to be scaled up to account for the inflation that has happened since the transaction time. For this task, you can use the Consumer Price Index (CPI) to measure inflation and assume a fixed monthly CPI.

Note: transactions.csv was generated specifically for this task – luckily, our real data has a much higher quality. However, the problem of currency conversion is real as some of our E-commerce stores operate in several different countries.

## Submission format

You can provide the final answer (together with your code and documentation) in any suitable format – for example, as a table output where each row represents a country and each column corresponds to one year.