

# Xevant Python Code Practice

## Purpose

The purpose of this exercise is to test your Python experience with parsing and creating files. Our data platform is responsible for ingesting over a thousand of files each month in order to power our products.

## Prerequisites

1. You should already have Docker installed on your computer from which you will be programming
2. Extract the provided zip file – **xevant\_python\_code\_practice.zip**
3. Write your code in the main function of the **file\_parser.py** file.
4. Review the **file\_config.py** file for useful values
5. See helper commands for docker at the bottom of the document. Note the “-v” command to map the volume for the file export.

## Code Instructions

- 1) Extract the .zip file called “/files\_inbound/example\_client\_files.zip”
- 2) Create a new CSV file from the .xlsx file using the second sheet called **PolicyData**
  - a) The new file should be named “**insurance\_data\_sample\_1667864342\_parsed.csv**” and written to the “/files\_outbound” directory.
  - b) Add three additional columns with values to the new CSV file.
    - **ROW\_NUMBER** - row number value for each row. (1,2,3,4, etc.)
    - **FILE\_NAME** – the original file name “**insurance\_data\_sample\_1667864342.xlsx**”
    - **FILE\_DATE** – parse the timestamp from the file name to generate a date time string value in the following format “2022-11-07 00:00:00”
  - b) Encapsulate non numerical fields in double quotes
- 3) Create a new CSV file from the .csv file

- a) The new file should be named “**work\_orders\_sample\_1667864342\_parsed.csv**” and written to the “**/files\_outbound**” directory.
  - b) Add 3 additional columns with values to the new CSV file.
    - **ROW\_NUMBER** - row number value for each row. (1,2,3,4, etc.)
    - **FILE\_NAME** – the original file name “**work\_orders\_sample\_1667864342.csv**”
    - **FILE\_DATE** – parse the timestamp from the file name to generate a date time string value in the following format “2022-11-07 00:00:00”
  - c) Encapsulate non numerical fields in double quotes
- 4) Repeat step 3 for the file “**employee\_data\_sample\_1667864342.csv**”
- a) Name the new file after adding columns  
“**employee\_data\_sample\_1667864342\_parsed.csv**”
- 5) Zip up your entire project directory, including the new CSV files, and email it to [cody.hatch@xevant.com](mailto:cody.hatch@xevant.com) for review.

## Docker Help Commands

### Build Image

```
docker build -t file_parser_image .
```

### Run Docker Container

```
docker run -v [YOUR PROJECT PATH]/files_outbound:/files_outbound -it --rm --name file_practice_container file_parser_image
```