

Please find below 3 short coding tasks to complete in advance of your interview. We would like you to walk through and demo this code on the day of your interview.

We want to see how you would tackle these tasks as a working POC, but we do not need to see a full production worthy system.

Please use any technologies, languages, third party libraries or provided utilities to help you complete the tasks.

We expect you to spend no more than 2 to 3 hours on these tasks. Please contact us if you have any questions.

### **Task 1**

Use the provided Customer and Order CSV files to create corresponding tables in a database.

### **Task 2**

Build a simple API on top of this data. This API should provide REST endpoints that return JSON for Customers and their Orders.

The REST endpoints should be as follows:

- One that returns Customer and Order data for all active Customers, ordered by “customer\_id” in ascending order, and then by Order “date” in descending order.
- Another that returns the same data for a single Customer queried by a “customer\_id” parameter, that can be passed in to the request, to your API.

### **Task 3**

Build an Integration that could be run on a schedule, for example as an ETL job.

This should call the first endpoint of your API above to return the JSON payload for all active customers, transform the data, and then send the data onwards to a different API, logging the returned HTTP Response Code.

- Transform the data by concatenating “firstname” and “surname” fields into a single field.
- You can use <https://postman-echo.com/post> as the final API endpoint.

Please store all your work in a code repository, such as Github or Bitbucket, and share the links with us, at least the day before the interview.

Please note, we will take a few minutes after your demo to ask how you might improve your API and Integration to make them more production worthy. This will be discussed at a very high level, rather than looking at any changes to your code.