

NEW DATA JOINER ASSESSMENT

Intro

Congratulations, you made it to the second round!

In preparation for your next interview, we ask you to complete a set of analytical tasks. Here are the requirements:

- You are expected to complete the tasks in advance.
- You will give a ~10-minute presentation of your findings during the interview.
- We will use this to assess your analytical, technical and presentation skills.
- Data files required to complete the tasks are provided.
- Use Python or R to complete these tasks.
- Choice of presentation tools is up to you.

Tasks

1. File 'import_data.csv' contains raw data that we want to import into our system. We want to avoid bad data entering our database. We also want to make sure we are not missing any data. Your tasks are:
 - a. Conduct exploratory analysis of the file.
 - b. Identify irregularities and potential problems.
 - c. Present your findings.
2. File 'event.csv' contains a snippet from our event database. Every event is associated with a consumer. Your tasks are:
 - a. Conduct exploratory analysis of the file.
 - b. Are some events more likely to happen together?
3. File 'mortgage.csv' contains a snippet from our mortgage database. Your tasks are:
 - a. Conduct exploratory analysis of the file.
 - b. Are there relationships between mortgage features?
 - c. Can you identify mortgage niches and groupings?
4. Files 'mortgage.csv' 'applicant.csv' and 'event.csv' can be used to connect consumers to mortgages through their respective ids. Your tasks are:
 - a. Connect event information to mortgage information.
 - b. What impact (if any) consumer events have on mortgage state?