Jetro Data Science Test

We give all our candidates the attached problem to get a good approximation of a candidate's understanding of statistical/machine learning, how they approach business problems and translate their findings for both technical and non-technical audiences, as well as things like the ability to write well documented, legible, and reusable code.

[[](https://corporatejetrord-my.sharepoint.com/:x:/g/personal/kfernandes_jetrord_com/EX3ksYmxP8dBv6XeVu24vbMBDHdrgXqoVOxTzIJJTmMPAw?rtime=w3CFqzKm2kg)customer\_data.csv](https://corporatejetrord-my.sharepoint.com/:x:/g/personal/kfernandes_jetrord_com/EX3ksYmxP8dBv6XeVu24vbMBDHdrgXqoVOxTzIJJTmMPAw?rtime=w3CFqzKm2kg)

The data set ("customer\_data.csv" link above - Please let us know if you have trouble accessing it):

* Gives you information on possible incremental sales to customers by departments that we have identified. Each row is a unique customer while each column represents a category of products.
* The values contained are the dollar amount potential incremental sales for a customer/category combination.

We would like you to:

1. Group together customers with similar potential sales opportunities - this would help our marketing teams create targeted campaigns for each group of customers
2. Find sets of customers with similar properties with respect to their categories and sales opportunities
3. Have an easy-to-understand way of describing a typical customer from each of the sets/groups that you devise

Feel free to add other aspects to this task as you see fit

You are free to use any open-source tools available to complete this task. We expect you to provide us with:

1. Your code
2. A short write up on your findings (Please keep it short and to the point)