Data Analyst Challenge

CONTEXT:

This challenge is meant to give you a taste of the kind of problems and tasks you would encounter at 99.co as a member of the Data/Product Team. We will assess your challenge upon submission, and if you make it to the next round, we will invite you to present your results to the team. The audience will be other members of the Data and Product teams so you can expect them to be data literate.

You are welcome to use your tool of preference for the analysis portion (SQL, Python, R, etc), but you must set up database tables for the data provided as any data role at 99.co requires knowledge of SQL and databases. Regardless of the tool you choose, we would like to see your work so we can better understand your thinking process. You have one week to complete this challenge.

DATA PROVIDED:

The data corresponds to a subset of our searches and enquiries for the month of July 2018.
All dates are in UTC.

- Enquiries received by agents from consumers
- Searches by district
- Listings
- Users

Data can be found here

QUESTIONS TO ANSWER:

1. Write an SQL query that ranks districts by search volume (if the search was for more than one district then each value in the list is counted as one search)
2. Which district had the highest day-on-day percent change in search volume and when did it occur?
3. How would you segment our user base based on their search behaviour?
4. We want to drive conversions in the form of enquiries, what recommendations would you make to the Product Team?