

## Case Study: Senior Specialist: Data Science

Please complete the questions below. Your responses are to be shared during an interview should you be shortlisted.

The data set attached contains data from a mobile telecoms operator Yellow mobile. The data are for 6 weeks, and a data dictionary is attached.

Data consumption is the life blood in the telecoms industry, however, there exists scenarios where subscribers reduce and stop using data, this is referred to as data churn. You have been tasked to look at how we can use insights and analytics to drive down data churn. Use the data set attached to prepare a 15 mins presentation to the leadership on your finding. Kindly ensure the following are done and their results are included in your presentation

- Conduct a preliminary analysis of the data and share some key insights as well as statistical matrices. Please use SQL and comment on the code.
- Construct a model predicting data droppers (subscribers that will stop using data) using the data set shared, please evaluate at least 3 different models. Compare the model's performance and which model is recommended. Complete this using any modelling tool of your choice include commentary in code.
- Based on the data shared and the work done above, segment the results from your chosen model and recommend what targeted campaigns can be conducted and what is the expected business impact.