Case study : Predicting Customer Churn at QWE

Use a statistical package (such as “R”)

Questions:

1. By visualizing the data (without any statistical test), can you claim that Wall’s belief about the dependence of the churn rates on customer age is supported?

2. Run a single regression model that best predicts the probability that a customer leaves. Here, a single regression model means one regression model with all the data (without subsampling). It **doesn’t** mean a simple regression model with a single variable.

    a. What is the predicted probability that customer 672 will leave between December 2011 and February 2012? Is that high or low? Did that customer actually leave?

    b. What about customers 354 and 5203?

3. How sensible is the approach with a single regression model? Can you suggest a better approach? Provide updated estimates of probabilities that customers 672, 354 and 5,203 will leave. What factors contribute the most to the predicted probabilities that these customers will leave?

4. Each team should submit the report as well as the analysis file before the class. The system will allow you to upload multiple files in the submission.