THINKIFIC

Congratulations! You've just been hired by ThinkRobots, a SaaS company in the online robots-for-hire space. ThinkRobots provides an online AI driven VA service for SMBs. As a new SaaS company, the firm is constantly working to better understand their available client data to effectively create successful customers. It's your first week and you've already had a couple of assignments!

Overall, this assignment is expected to take up to 3 hours. Task 1 is expected to take you 1.5-2.5 hours and Task 2 is expected to take you 30-60 minutes. **Please note the amount of time you spent on each task in your final submission.** Once complete, upload your completed take-home test, as well as your scratch work where you completed your calculations, using the link provided in our email.

Note: Our intent is definitely not to solicit free work—it's to evaluate your approach to solving real challenges you would be faced with if you entered into this role. If you'd prefer to demonstrate your skills with a completely unrelated company and industry, or would rather share past examples, we're cool with that.

Task 1: Data Insights

The Product team is having a last-minute planning meeting to figure out some quick changes they can make to increase revenue and have asked for your help. They have provided you with the data file—*ThinkRobots 2019*—which contains some of their customer data (more details below).

Your task is to provide the Product team with insights based on the data that you think might be valuable for them as they go into their planning meeting (despite the lack of available time). Specifically, they have asked you the following question: **Which of the existing Marketing Segments is the most successful?**

Please include any supporting material separately to back up your assertions. Also provide comments as to what additional analysis you'd like to conduct if given more time with the existing data, and/or if there are other data sources that you would like to put into place or get access to in order to better support the team.

Notes about the data:

The product team is generally interested in factors like customer churn, demographic data, and activation over time. Ultimately, their interest is in which customers are getting the most value and have the highest returns to the company so they can focus on the success of these types of customers.

- **Customer ID** - Unique ID of customer
- **Free Account Created Date** - Original date of signup
- **Last Seen** - The last date that the customer logged into the system
- **Session Count** - The total number of times that the customer has logged into the system (the best indicator of how much value the customer is getting out of the system)
- **Segment** - The specific marketing segment the customer belongs to
- **Billing Account #** - The billing account ID for the customer
- **First Name** - Primary account holder first name
- **Account Status** - Whether customer is paying or has cancelled (churned)
- **Upgraded Account Created Date** - Date of upgrade from free to paid account
- **Upgraded Account Cancelled Date** - Date of cancellation (where applicable)
- **Total Charges** - The total amount paid by the customer to date
- **Release Date** - Date of major new feature releases
- **Release Description** - Brief description of new product releases

You have full creative license, and where factors are unknown, state any assumptions you've used to formulate your insights!

Task 2: Databases/SQL assignment

You are asked to write a SQL script for the Custom Success Managers (CSM's) to provide live access to revenue data from their accounts. One CSM, Mark, owns accounts with names starting from A-L while the second, Janet, owns M-Z. You are given 4 tables, their column names, and their respective data types.

Create 3 queries which determine:

- Total Revenue grouped by CSM
- % Revenue from now Cancelled Accounts grouped by Segment
- Total Revenue of Paying Customers grouped by CSM and by Segment