We ask that you take a maximum of 1.5 hours on this challenge. When you submit your solution please include approximately how long it took you to complete it and any challenges you came across along the way.

All the best,
The 6sense Analytics Team

Answer the following questions by writing SQL queries that leverage the tables below. Assuming you are using a presto query engine and are granted read-only access, use only one query to answer each question.

Name: Contact

Column Name:	Data Type:	Description:
id	integer	Unique id for contact
company_id	integer (foreign keyed to company.id)	Unique id for a company that the contact works for
contact_name	varchar	Full name of contact
contact_email	varchar	Email address of contact
create_dt	date	Date when contact added to database

Name: Company (contains both prospects and won customers)

Column Name:	Data Type:	Description:
id	interger	Unique id for company
company_name	varchar	Name of company

create_dt	date	Date when company added to database
ss_score	integer	Predictive score for the likeness of that a company buys the 6sense product (1-100 scale)
won	boolean	Indicator if company purchased 6sense product (is a customer)
won_dt	date	Date company purchased the product. Value is null if the company is not a customer.

Name: Interaction (contains interactions from sales and customer service teams)

Column Name:	Data Type:	Description:
contact_id	integer (foreign keyed to contact.id)	Unique id for contact
rep_name	varchar	Name of the 6sense rep who made the interaction with the contact
rep_email	varchar	Email of rep who made the interaction
interaction_channel	varchar	Channel used to engage with contact (email, phone, in-person event etc.)
interaction_dt	date	Date of interaction

Questions:

I.

    A. What percentage of companies with a 6sense score (ss_score) of at least 85 and were added to the database (created) in January 2018 have been won (became a 6sense customer)?

    B. At the company level, what is the average number of contacts that were interacted with before a successful (won) sale?

    C. What is the interaction channel and the name of BOTH the Sales rep and Customer Service rep who last interacted with the following companies: XYZ inc., ABC co., 123 ltd.

    Note: Sales reps interact with a company through the date of a sale, while CS reps interact with a company after the date of sale.

    Bonus (time permitting): See if you return the number of times those reps have interacted with this company in the same query output.

II. The 6sense Marketing team is planning on running a campaign in which they mail a promotional item to all prospects (individuals) that they met at a recent event, with the goal that this mailer will lead to a sales call with the prospect.

The 6sense Data Science team has created a "Qualifying Model" that scores all prospects (those met at previous events, those interacted with through other channels, and those that have never been contacted) and assigns them a score (1-100 scale) predicting the likelihood that a prospect, after receiving a promotional item in the mail, will take a sales call. The Data Science team suggests that Marketing should target any prospect with a score greater than 70.

How can the team test if targeting with the "Qualifying Model" score impacts the success of the campaign? Explain how you would perform this test.