Data Science Interview:

As part of the interview process, please perform the tasks below. Be sure to note your steps and thought processes as you will walk us through your work.

1) Examine both your training and test sets and perform some simple EDA (10-15 min).

2) An attribution model is a model that shows the primary drivers of product sales and the impact of these individual factors. With the training data attached, please build an attribution model with ORD_UNITS as the dependent variable. You may use any modeling technique or algorithm you'd like (1-3 hours).
   - Please return a data frame with all the test data and a column of your predicted ORD_UNITS appended.
   - Your test set does not contain the true ORD_UNITS values, so you will not be able to use this for evaluation. We will calculate the evaluation metrics for your output.

3) One of the more common problems that we approach on the One Demand Advanced Analytics team is discount optimization. Using the test set and your predicted ORD_UNITS values, please find the optimal SnSDiscount for the Brand-Tech classifications below (0.5-1.5 hours).

BRAND	TECH	Optimal SnSDiscount
NUTRO	DRY	
CESAR	WET	
GREENIES	C&T	