Data Analyst Test

Thank you for applying to the Analytics department at UncommonGoods! We've prepared a short test to evaluate your analytical, programming, and communication skills. If you have any questions or feel like you need more information, don't hesitate to ask. Good luck.

Question 1
The tables described below outline a theoretical data structure that could be used in evaluating a website AB test, with each session receiving either an "A" experience, or a "B" experience. Please write Redshift SQL code that constructs a view giving total seesions, orders, and revenue by day, device, and experience. Be sure to include comments in the code to assist anyone reading it.

schema	table	column	Type
transactions	orders	order_id	Integer
transactions	orders	session_id	integer
transactions	orders	order_time	timestamp
transactions	orders	revenue	decimal
website	sessions	session_id	integer
website	sessions	session_time	timestamp
website	sessions	device_type	varchar
ab_testing	test_experiences	session_id	integer
ab_testing	test_experiences	experience	varchar

Here is an example of what the data should look like:

date	experience	device	sessions	orders	revenue
2019-05-11	A	desktop	10,369	108	$63,933
2019-05-11	A	mobile	16,368	82	$56,352
2019-05-12	A	desktop	10,266	113	$65,433
2019-05-12	A	mobile	18,203	88	$57,452
2019-05-11	B	desktop	10,503	122	$65,933
2019-05-11	B	mobile	16,177	87	$57,379
2019-05-12	B	desktop	10,992	125	$68,114
2019-05-12	B	mobile	18,553	93	$59,900

Question 2
The csv included with the test contains a hypothetical data set similar to what we would get with the view from Question 1. Use this data to evaluate the results of the test, and come up with recommendations for what next steps we might take with it. Include visualizations of the data with your analysis.