Lab | Making predictions with logistic regression

In this lab, you will be using the Sakila database of movie rentals.

In order to optimize our inventory, we would like to know which films will be rented next month (**JUNE 2005**) and we are asked to create a model to predict it.

Instructions

1. Create a query or queries to extract the information you think may be relevant for building the prediction model (the features you want to use in your model to make a prediction). It should include some film features and some rental features. **Use the data from MAY 2005 (Training data)**.
2. **Create a query to get the list of films and a boolean indicating if it was rented in MAY 2005 (Target).**
3. Read the data into a Pandas dataframe.
4. Analyze extracted features and transform them. You may need to encode some categorical variables, or scale numerical variables.
5. Create a logistic regression model to predict this variable (**was rented in may?**) from the cleaned data.
6. Evaluate the results.

(BONUS)

1. Now that you have your model, trained and tested, you are able to predict which films will be rented in June.
2. Create a query or queries to extract the same information you used to build your prediction model.
3. Read the data into a Pandas dataframe.
4. Analyze extracted features and transform them. You may need to encode some categorical variables, or scale numerical variables.
5. Make your predictions using your previous model.