

# Approach 1

For each group (channel, country)

- Train a regression model on the features (year, month, day) and label (number of tickets).
- Generate a test sample. The date of the test sample is the last date of the train sample in the sample group plus 10 days.
- Predict the label (number of tickets) of the test sample with the trained model.

This approach is based on the assumption that for each group (channel, country) the number of tickets can be model by a regression model with the features: year, month, and day. But it also shows that the features are not sufficient enough to predict the number of tickets, while some groups have few samples.

# Approach 2

For each group (channel, country)

- Compute the average number of tickets and this number would be the number of tickets in the next 10 days

# Approach 3

- Train a regression model on all the data. The features are: date (year, month, day), channel, and country. The label is the number of tickets.
- For each group (channel, country), create a test sample as presented in Approach 1.
- Use the trained regression model to predict the number of tickets of all the test samples.