

**Tuesday Jan 28, 2025**

In-class Warm Up

COSC 410A Applied Machine Learning

Prof. Forrest Davis

Name:

Discuss and complete the following questions with the person nearest you. You **may** be asked to share your thoughts with the class.

1. What is the best restaurant in town?
  
2. Say you want to model daily ridership in the New York City subway system. You have two features that you aim to use to model the ridership: day type (where 1 means weekend and 0 means weekday) and population. Namely, you want to fit the following model (note this is for illustrative purposes):

$$\text{daily ridership} = w_1 x_{\text{day type}} + w_2 x_{\text{population}} + b$$

Describe what you expect for the parameters for this model. For  $w_1$  and  $w_2$ , what sign (positive, negative) do you anticipate them having? What does  $b$  encode?