Solution Review: Churn Prediction

This lesson will present the solution to the exercise of churn prediction in the previous lesson.

```
we'll cover the following ^
• Solution
```

Solution

```
def churn_predict_acc(X,Y,test_inputs,test_outputs):
    # Fit model
    Ir = LogisticRegression()
    Ir.fit(X,Y)
    # Get predictions and accuracy
    preds = Ir.predict(test_inputs)
    acc = accuracy_score(y_true = test_outputs,y_pred = preds)
    return acc

df = pd.read_csv('telecom_churn_.csv')
X = df.drop(columns = ['Class'])
Y = df[['Class']]
print(churn_predict_acc(X,Y,X[:100],Y[:100]))
```

The solution is simple. We make a logistic regression model in **line 3**. We fit the model using the x and y provided in the next line. We take the predictions by using the predict function in preds in **line 6**. Then we use the accuracy_score function and provide both the actual values and the predicted values. The function gives us the accuracy of the predictions, which we then return in **line 8**.

With this exercise, we conclude this chapter. In the next chapter, we will continue our discussion of predictive models, and look at some other models that are used.