# Code to add back to AWS model

with open('ss\_title\_tag.pkl', 'wb') as file:

pickle.dump(ss, file)

lr = LogisticRegression()

lr.fit(X\_train\_sc, y\_train)

with open('log\_reg.pkl', 'wb') as file:

pickle.dump(lr, file)

(Reget data first)

gb\_reg = GradientBoostingRegressor()

gb\_reg.fit(X\_train\_sc, y\_train)

with open('gb\_regr.pkl', 'wb') as file:

pickle.dump(gb\_reg, file)

preds = lr.predict(X\_test\_sc)

cm = confusion\_matrix(y\_test, preds)

pd.DataFrame(cm, columns=range(2,10), index=range(2,10))

from sklearn.metrics import r2\_score,confusion\_matrix, roc\_auc\_score, roc\_curve

sns.heatmap(pd.DataFrame(cm, columns=range(2,10), index=range(2,10)))