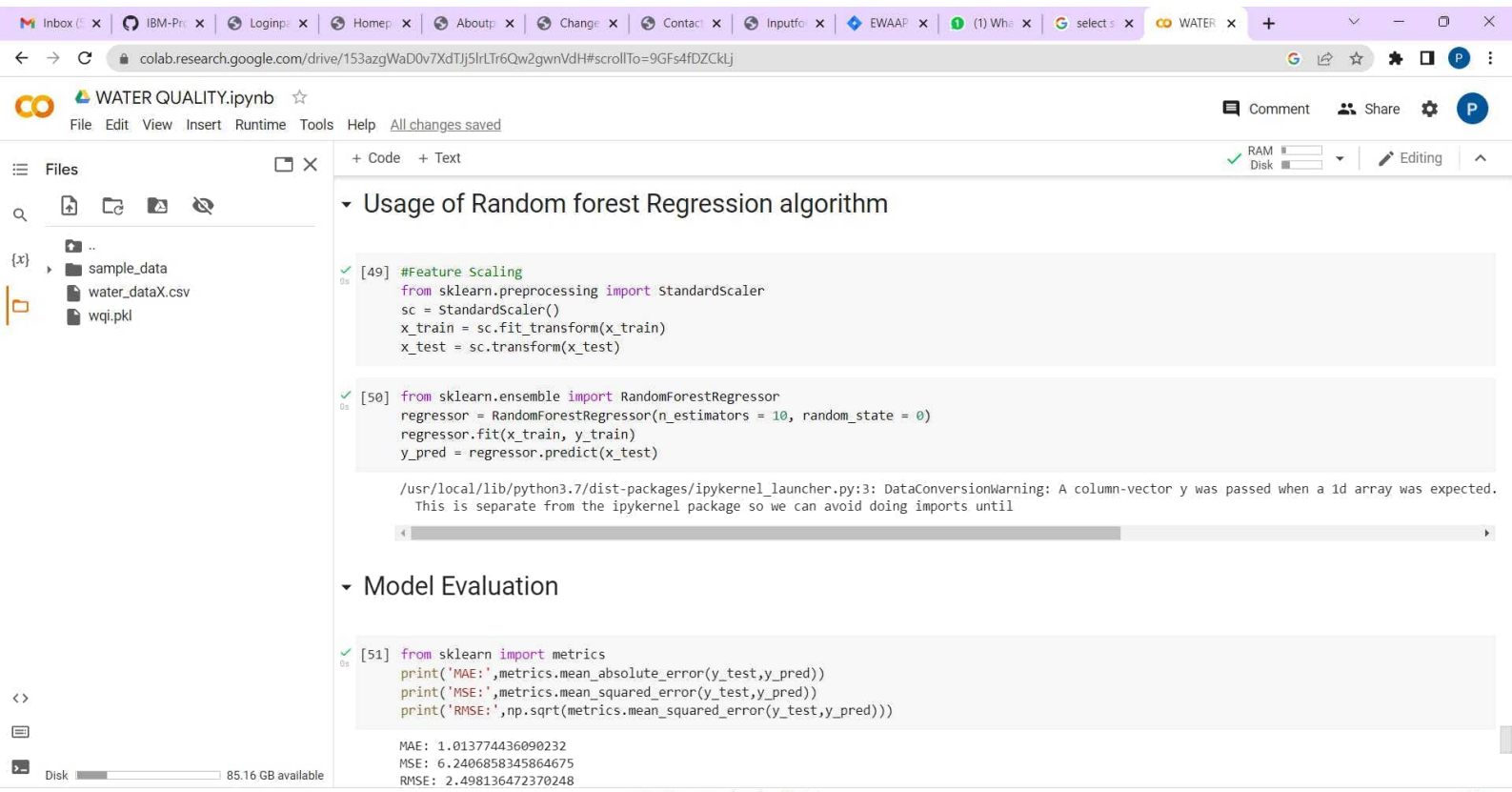
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water_dataX.csv
wqi.pkl
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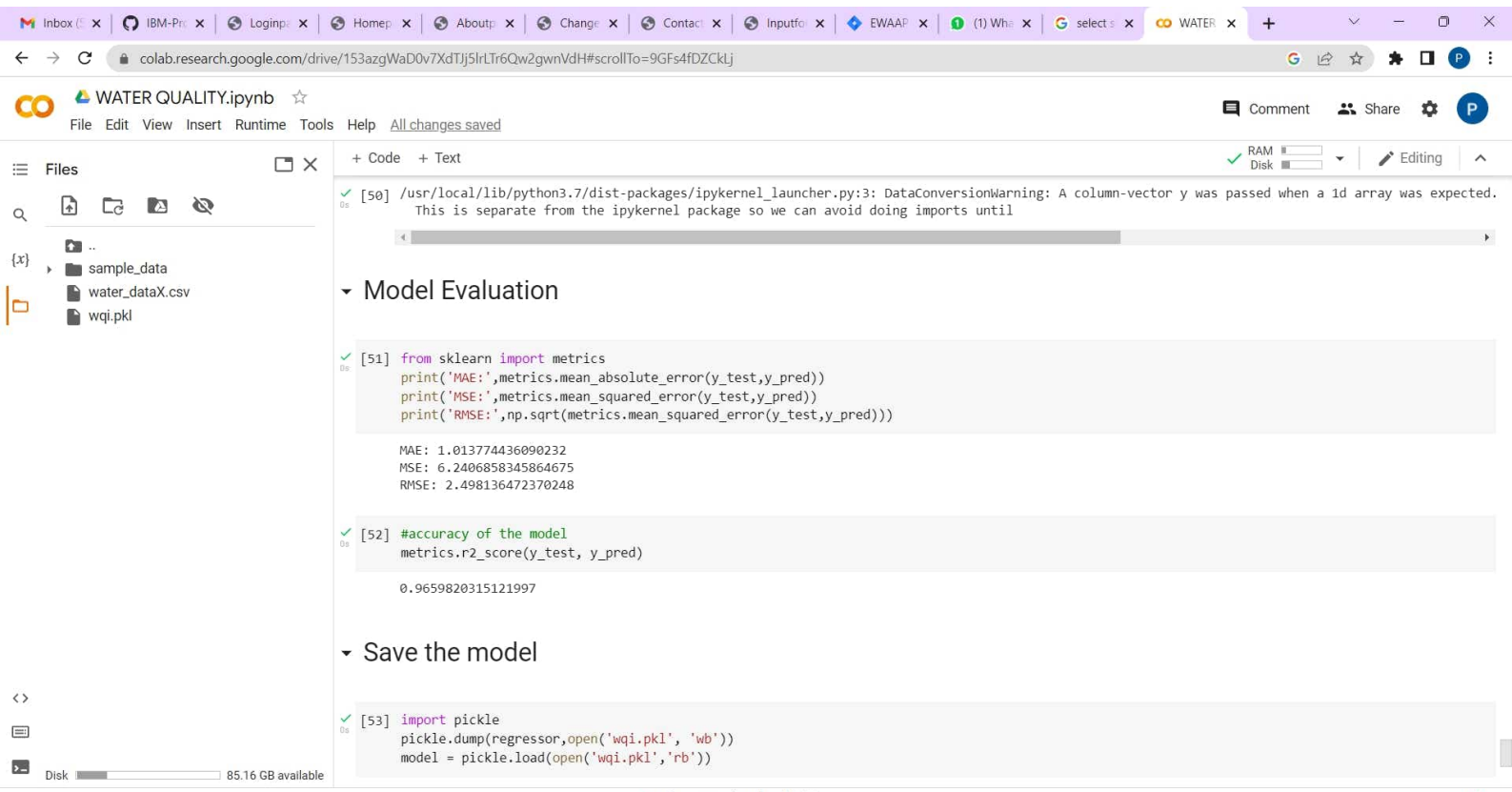
Editing
Usage of Random forest Regression algorithm
[49] #Feature Scaling
from sklearn.preprocessing import StandardScaler
sc = StandardScaler()
x_train = sc.fit_transform(x_train)
x_test = sc.transform(x_test)
[50] from sklearn.ensemble import RandomForestRegressor
regressor = RandomForestRegressor(n_estimators = 10, random_state = 0)
regressor.fit(x_train, y_train)
y_pred = regressor.predict(x_test)
/usr/local/lib/python3.7/dist-packages/ipykernel_launcher.py:3: DataConversionWarning: A column-vector y was passed when a 1d array was expected.
This is separate from the ipykernel package so we can avoid doing imports until
Model Evaluation
[51] from sklearn import metrics
print('MAE:',metrics.mean_absolute_error(y_test,y_pred))
print('MSE:',metrics.mean_squared_error(y_test,y_pred))
print('RMSE:',np.sqrt(metrics.mean_squared_error(y_test,y_pred)))
MAE: 1.013774436090232
MSE: 6.2406858345864675
RMSE: 2.498136472370248
0s completed at 15:58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MAE: 1.013774436090232
MSE: 6.2406858345864675
RMSE: 2.498136472370248
[52] #accuracy of the model
metrics.r2_score(y_test, y_pred)
0.9659820315121997
Save the model
[53] import pickle
pickle.dump(regressor,open('wqi.pkl', 'wb'))
model = pickle.load(open('wqi.pkl','rb'))
0s completed at 15:58