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Overview:

https://colab.research.google.com/drive/1wwY7bzjD61c2O3Ake7jiyeXzdOp3Lcw2?usp=sharing

```
] import pandas as pd
   from sklearn.model_selection import train_test_split
   from sklearn.tree import DecisionTreeRegressor
   from sklearn.metrics import mean_absolute_error
   from sklearn.preprocessing import LabelEncoder
   # Mengunduh data dari Google Drive
   url = '/content/melb_data.csv'
   data = pd.read_csv(url)
   # Menampilkan 5 baris pertama dari dataset
   print(data.head())
   # Membuang baris dengan nilai yang hilang (missing values)
   data.dropna(inplace=True)
   # Memisahkan fitur dan label
   X = data.drop('Price', axis=1) # Fitur
   y = data['Price'] # Label
   # Melakukan Label Encoding pada kolom kategorikal jika diperlukan
   label_encoder = LabelEncoder()
   categorical_cols = X.select_dtypes(include=['object']).columns.tolist()
   for col in categorical_cols:
       X[col] = label_encoder.fit_transform(X[col])
   X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
   # Membuat model Decision Tree Regressor
   model = DecisionTreeRegressor()
   # Melatih model
   model.fit(X_train, y_train)
   # Memprediksi harga untuk data uji
   y_pred = model.predict(X_test)
   # Menghitung Mean Absolute Error (MAE)
   mae = mean_absolute_error(y_test, y_pred)
   print("Akurasi Decision Tree:", mae)
```

```
Unnamed: 0 Suburb
⊡
                                    Address Rooms Type Price Method \
       1 Abbotsford 85 Turner St 2 h 1480000.0 S
    0
              2 Abbotsford 25 Bloomburg St 2 h 1035000.0
4 Abbotsford 5 Charles St 3 h 1465000.0
5 Abbotsford 40 Federation La 3 h 850000.0
6 Abbotsford 55a Park St 4 h 1600000.0
                                                                   SP
                                                                   PΙ
    4
                                                                    VB
      SellerG Date Distance ... Bathroom Car Landsize BuildingArea \
    0 Biggin 3/12/2016 2.5 ... 1.0 1.0 202.0
                                                                   NaN
    1 Biggin 4/02/2016
                           2.5 ...
                                         1.0 0.0
                                                     156.0
                                                                    79.0
                           2.5 ...
                                                     134.0
    2 Biggin 4/03/2017
                                         2.0 0.0
                                                                  150.0
                           2.5 ...
    3 Biggin 4/03/2017
                                         2.0 1.0
                                                      94.0
                                                                   NaN
    4 Nelson 4/06/2016
                           2.5 ...
                                         1.0 2.0
                                                     120.0
                                                                   142.0
       YearBuilt CouncilArea Lattitude Longtitude
                                                          Regionname \
         NaN Yarra -37.7996 144.9984 Northern Metropolitan
    0
        1900.0
                      Yarra -37.8079 144.9934 Northern Metropolitan
         1900.0
                      Yarra -37.8093 144.9944 Northern Metropolitan
    2
                     Yarra -37.7969 144.9969 Northern Metropolitan
          NaN
         2014.0
                     Yarra -37.8072 144.9941 Northern Metropolitan
       Propertycount
         4019.0
    0
             4019.0
    1
    2
             4019.0
             4019.0
    4
             4019.0
    [5 rows x 22 columns]
    Akurasi Decision Tree: 243127.36451612902
```