

Membuat Linear Regression

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import numpy as np
import pandas as pd
from matplotlib import pyplot as plt
from sklearn.linear_model import LinearRegression

df = pd.DataFrame([[151,63],[174,81],[138,56],[186,91],[128,47],[136,57],[179,76],[163,72],[152,62],[131,48]])
df.columns = ['x', 'y']
x_train = df['x'].values[:np.newaxis]
y_train = df['y'].values
lm = LinearRegression()
lm.fit(x_train,y_train)
print('Coefficient : ' + str(lm.coef_))
print('Intercept : ' + str(lm.intercept_))
x_test = [[170],[171]]
p = lm.predict(x_test)
print(p)
pb = lm.predict(x_train)
dfc = pd.DataFrame({'x': df['x'],'y':pb})
plt.scatter(df['x'],df['y'])
plt.plot(dfc['x'],dfc['y'],color='red',linewidth=1)
plt.xlabel('Tinggi dalam cm')
plt.ylabel('Berat dalam Kg')
plt.show()
```

