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import numpy as np

import pandas as pd

from sklearn.model_selection import train_test_split

from sklearn.linear_model import LinearRegression


data={'YearsExperience':[1,2,3,4,5,6,7,8,9,10], 'Salary':[50000,60000,70000,80000,90000,100000,110000,120000,130000,140000]}

df=pd.DataFrame(data)


X=df.iloc[:,0:1].values

y=df.iloc[:,1].values


X_train,X_test,y_train,y_test=train_test_split(X,y,test_size=0.3,random_state=0)#Printthetrainingandtestingsets

print("X_train:\n",X_train)

print("y_train:\n",y_train)

print("X_test:\n",X_test)

print("y_test:\n",y_test)


regressor=LinearRegression()

regressor.fit(X_train,y_train)


print("Coefficients:",regressor.coef_)

print("Intercept:",regressor.intercept_)

```