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| 교육 제목 | ML modelling process |
| 교육 일시 | 2021. 10. 13 |
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| **교육 내용** | |
| 오전 | import pandas as pd  import numpy as np  import matplotlib.pyplot as plt  np.random.seed(1013)  x=np.arange(1, 30, 1, dtype=np.int16)  x  y=2\*x + 1  y\_random=y+np.random.normal(loc=0, scale=6, size=29)  #plt.plot(x,y,".", markersize=20)  plt.plot(x, y\_random, ".", markersize=20)  plt.show()  --------------------------------------------------------------------------  Sxy=(x-np.mean(x))\*(y\_random-np.mean(y\_random))  Sxx=(x-np.mean(x))\*\*2  Sxy=Sxy.sum()  Sxx=Sxx.sum()  beta\_1=Sxy/Sxx  beta\_0=np.mean(y\_random)-beta\_1\*np.mean(x)  print("beta\_1 = {}".format(beta\_1.round(3)))  print("beta\_0 = {}".format(beta\_0.round(3)))  # 추정량  y\_hat=1.894\*x+1.959  print(y\_hat)  #plt.plot(x, y, ".", markersize=20)  plt.plot(x, y\_random, '.', markersize=20)  plt.plot(x, y\_hat, color="r")  plt.show()  ---------------------------------------------------------------------------  from sklearn.linear\_model import LinearRegression  lr=LinearRegression()  x\_2d=x.reshape(-1,1)  lr.fit(x\_2d, y\_random)  print(lr.coef\_, lr.intercept\_)  print("x = ", np.shape(x))  print("x\_2d = ", np.shape(x\_2d)) |
| 오후 |  |