Week 7 Lab Instructions (3%)

Pandas

Let df be a pandas DataFrame constructed with the following code:

data = np.array([0, 7, 3, 6, 2, 8, 5, 9, 4]).reshape(3, -1)
df = pd.DataFrame(data, index=['One', 'Two', 'Three'], columns=['a', 'b', 'c'])

What is the output of the following code? Please append with detailed comments about why.

a. print(df)
b. df['a']
c. df['One']
d. df.loc['Two']
e. df[:2]
f. df.iloc[:,:2]
g. list(df.columns)
h. list(df.index)
i. df['b']['Two']
j. list(df.iloc[2, :])
k. df.drop('a', axis=1)
l. df[df.a !=5]
m. list(df.sum(axis=0))
n. df.iloc[:, list(df.sum(axis=0) < 17)]
o. df.sort_values(by='c')
p. df.sort_values(by='Two', axis=1)
q. df.T
r. (df<=2).any(axis=0)
s. df.applymap(lambda x: x*2-1)
t. df.apply(lambda x: max(x), axis=1)