Homework5A\_class7

Please use the rice production data.

# rice production data #####################################################

import pandas as pd

import numpy as np

from matplotlib import pyplot as plt

import os

path='/Users/sudip/Downloads'

data = pd.read\_csv(os.path.join(path, 'rice production across different countries from 1961 to 2021.csv'))

##############################################################################

It reads rice production from three different countries.

Use the following countries:

'United States of America', 'Bangladesh', 'France'

Q1. Plot the timeseries plot for each of the pairs.5 pts

Q2. Scale, detrend, and smooth the datasets.5 pts

Q3. Find out the correlations between the pairs. 5 pts

Q4. Find the Euclidian distances.5 pts

Q5. What do you interpret about the relationships between the rice production for three different countries using the correlation coefficients and the Euclidian distances? 5 pts

Use the same data and make three pairs:

['United States of America', 'Bangladesh']

['United States of America', 'France']

[ 'Bangladesh', 'France']