Python Culminating Task - Comparing % Farmland in Two Countries

Background: Given the mechanisation of agriculture in the industrial revolution, the United States has developed many factory farms in order to meet the needs of the growing population and meat-dependent diet.

Read this Nat Geo article & think about the following questions:

- How might factory farming reduce the amount of farmland needed for agriculture in the United States?
- Why are factory farms damaging to the environment? How might they contribute to climate change?

Look at the picture below, taken from this article, which highlights China's ever growing agricultural sector - since tomatoes in Xinjiang are less juicy and easier to transport, they make up ¼ of the world's ketchup production. Watch this video, which explains why large scale corporate agricultural production has increased in China. Think about the following questions:

- How did China incentivize farmers to produce food to meet the needs of their growing population?
- How might the distribution of China's agricultural production contribute to climate change?

Task:

1. Create a graph comparing the % land area used for agriculture in China and the US.
2. Customize the graph so that it's clear that there are two sets of data (ex. different colours for the two countries).
3. Label the axes and add a title for the graph.
4. Create a function that calculates the mean of % land used for each country, rounded down to the nearest whole number.
5. Ask the user which country they think has a higher average % of land used for agriculture. Based on their answer, either state that they are correct or incorrect, and provide the exact averages for both countries in a sentence response. Ask the user if they would like to see the graph with the data for the past 40 years. If they say yes, then show the graph.
6. Create an object called country, with the attributes of population and land size. Print the population for both countries.

Data:

Year	% land area used for agriculture (United States)	% land area used for agriculture (China)
1971	47.3088648	40.39624
1973	47.0795811	41.4858999
1975	46.9658127	42.682076
1977	46.9847013	43.9485527
1979	46.7479932	45.0765585
1981	46.7479932	46.1117887
1983	47.1013084	48.244135
1985	47.1013084	50.7386361
1987	46.6153362	51.9549437
1989	46.6153362	53.2032061

1991	46.6153362	54.4701089
1993	46.1786054	55.1991053
1995	45.8719112	55.6902039
1997	45.2982653	55.7435214
1999	45.189301	55.7222181
2001	45.2900702	55.3795407
2003	45.178849	54.9767062
2005	44.9451643	55.1151813
2007	45.0623443	54.8100187
2009	44.8170837	54.8084173
2011	44.2386282	54.8084173

Source: Agricultural land (% of land area) | Data (worldbank.org)

land_area_list_US = [47.3088648, 47.0795811, 46.9658127, 46.9847013, 46.7479932, 46.7479932, 47.1013084, 47.1013084, 46.6153362, 46.6153362, 46.6153362, 46.1786054, 45.8719112, 45.2982653, 45.189301, 45.2900702, 45.178849, 44.9451643, 45.0623443, 44.8170837, 44.2386282]

land_area_list_China = [40.39624, 41.4858999, 42.682076, 43.9485527, 45.0765585, 46.1117887, 48.244135, 50.7386361, 51.9549437, 53.2032061, 54.4701089, 55.1991053, 55.6902039, 55.7435214, 55.7222181, 55.3795407, 54.9767062, 55.1151813, 54.8100187, 54.8084173, 54.8084173]