A Simple Task for NUMPY:

Dataset under discussion - Sample URL:

https://github.com/ShahzadSarwar10/FULLSTACK-AI-BOOTCAMP-B2-MonTOFri-7TO9-PM-Explorer/blob/main/DataSetForPractice/RealEstate-USA.csv

It is REAL ESTATE – US data.

TASK:

1. Load above CVS file above, into separate – Array , with NUMPY, following columns
   "brokered_by",
   "price"
   "acre_lot"
   "city"
   "house_size"

2. Perform following operation on array of "price":
   As identified in theory at notes here:
   https://github.com/ShahzadSarwar10/FULLSTACK-AI-BOOTCAMP-B2-MonTOFri-7TO9-PM-Explorer/blob/main/Week3/Artificial%20Intelligence%20Fullstack%20-Week3%20%20-Web%20Scraping%20-Descriptive%20Statistics-%20SeaBorn%20-%20Notes_Rev1.pdf

   [From slide no 3 to slide no 8]
   sequentially and one by one- ALL operations like MODE, MEDIAN, SD and Print it.
   ALL Please. Verify that all stats calculation – are covered.

3. Perform following operation on array of "house_size":
   As identified in theory at notes here:
   https://github.com/ShahzadSarwar10/FULLSTACK-AI-BOOTCAMP-B2-MonTOFri-7TO9-PM-Explorer/blob/main/Week3/Artificial%20Intelligence%20Fullstack%20-Week3%20%20-Web%20Scraping%20-Descriptive%20Statistics-%20SeaBorn%20-%20Notes_Rev1.pdf

   [From slide no 3 to slide no 8]

   sequentially and one by one- ALL operations like MODE, MEDIAN, SD – and Print it.
   ALL Please. Verify that all stats calculation – are covered.

4. Perform following operations on - array of [array of "price"] and [array of "house_size"]
   Addition [via both operator "+" and method "Add"] - Print it.
   Substrat [via both operator "-" and method "sub"] - Print it.
   Mulitply [via both operator "*" and method "multi"] - Print it.

5. Create a "2D array" based on array of [array of "price"] and [array of "house_size"]
   Print it.

6. Create a “3D array” based on array of [array of “house_size”] and [array of “price”] and [array of “acre_lot”]
   Print it.

7. Iterate the array - of [array of “price”]
   With function of “np.nditer(“
   Print each item.
   Understand it.
8. Iterate the array - of [array of “price”]
   With function of “np.ndenumerate(“
   Print each item.
   Understand it.
9. Use 7 common properties of array - of [array of ““price”].
   Ndim , shape , size……..use command 7 in code – print them

10. Slice array of [Question 5, as - “2D array” based on array of [array of “price”] and [array of “house_size”]]

    Row : from 1st value to 3rd value
    Column: from 2nd value to 4th value

11. Slice array of [Question 5, as - “2D array” based on array of [array of “price”] and [array of “house_size”]]

    Row : from 2nd value to 8th value
    Column: from 3rd value to 5th value
12. Learn – what are geometric operation in NUMPY.
    np.sin , np.cos
    apply common 6 to - “2D array” based on array of [array of “price”] and [array of “house_size”] , created in Question 5.

Reference code: https://github.com/ShahzadSarwar10/FULLSTACK-AI-BOOTCAMP-B2-MonTOFri-7TO9-PM-Explorer/blob/main/Week2/Case2-1-NumPy-Zameencom-property-data-By-Kaggle.py

Ask questions, if you have confusions. ASK me, Call me on whatsapp.

Let’s put best efforts.

Thanks