

A Simple Task for NUMPY:

Dataset under discussion - Sample URL:

<https://github.com/ShahzadSarwar10/Fullstack-WITH-AI-B-3-SAT-SUN-6Months-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-WITH-AI-B-3-SAT-SUN-6Months-Explorer/blob/main/Week4/Artificial%20Intelligence%20Fullstack%20Week4%20%20Web%20Scraping%20Descriptive%20Statistics-%20SeaBorn%20-%20Notes\\_Rev1.pdf](https://github.com/ShahzadSarwar10/Fullstack-WITH-AI-B-3-SAT-SUN-6Months-Explorer/blob/main/Week4/Artificial%20Intelligence%20Fullstack%20Week4%20%20Web%20Scraping%20Descriptive%20Statistics-%20SeaBorn%20-%20Notes_Rev1.pdf)  
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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-WITH-AI-B-3-SAT-SUN-6Months-Explorer/blob/main/Week4/Artificial%20Intelligence%20Fullstack%20Week4%20%20Web%20Scraping%20Descriptive%20Statistics-%20SeaBorn%20-%20Notes\\_Rev1.pdf](https://github.com/ShahzadSarwar10/Fullstack-WITH-AI-B-3-SAT-SUN-6Months-Explorer/blob/main/Week4/Artificial%20Intelligence%20Fullstack%20Week4%20%20Web%20Scraping%20Descriptive%20Statistics-%20SeaBorn%20-%20Notes_Rev1.pdf)  
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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 1<sup>st</sup> value to 3<sup>rd</sup> value  
Column: from 2<sup>nd</sup> value to 4<sup>th</sup> value
11. Slice array of [Question 5, as - "2D array" based on array of [array of "price"] and [array of "house\_size"] ]  
  
Row : from 2<sup>nd</sup> value to 8<sup>th</sup> value  
Column: from 3<sup>rd</sup> value to 5<sup>th</sup> 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-WITH-AI-B-3-SAT-SUN-6Months-Explorer/blob/main/Week3/Case3-1-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