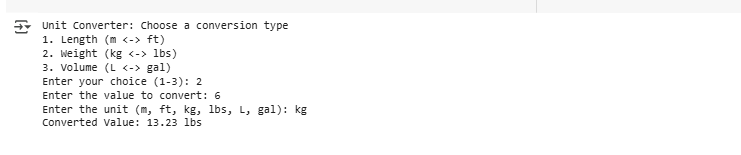
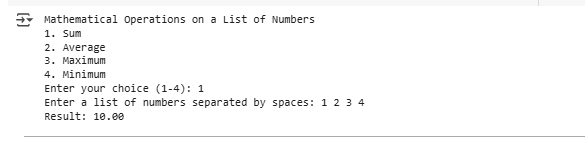
**4.1 Exercise on Functions:**

Task- 1:  
****

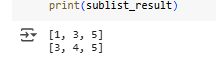
Task- 2:  
****

**4.2 Exercise on List Manipulation:**

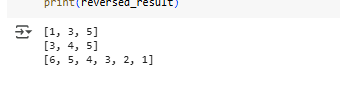
1. Extract Every Other Element:

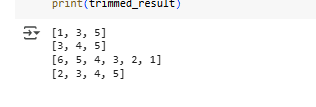


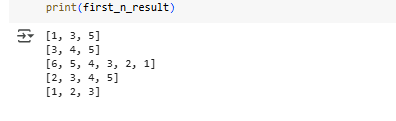
2. Slice a Sublist:



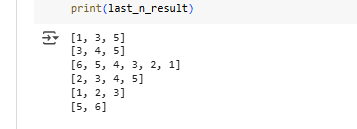
3. Reverse a List Using Slicing:

  
4. Remove the First and Last Elements:

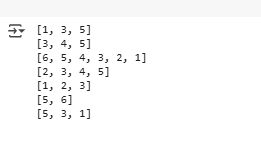
  
5. Get the First n Elements:



6. Extract Elements from the End:

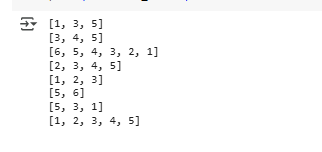


7. Extract Elements in Reverse Order:

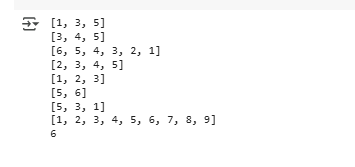


**4.3 Exercise on Nested List:**

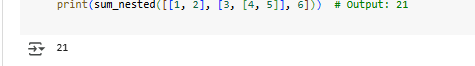
1. Flatten a Nested List:



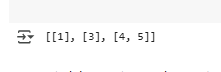
1. Accessing Nested List Elements:



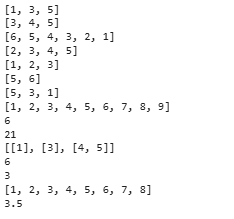
1. Sum of All Elements in a Nested List:



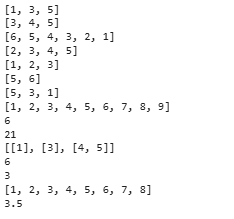
1. Remove Specific Element from a Nested List:



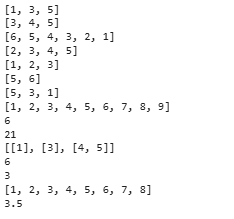
1. Find the Maximum Element in a Nested List



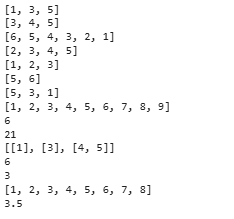
1. Count Occurrences of an Element in a Nested List:



1. Flatten a List of Lists of Lists:

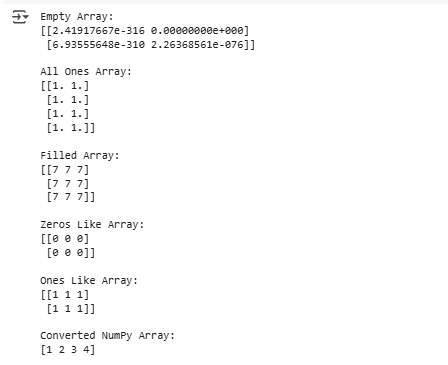


1. Nested List Average:

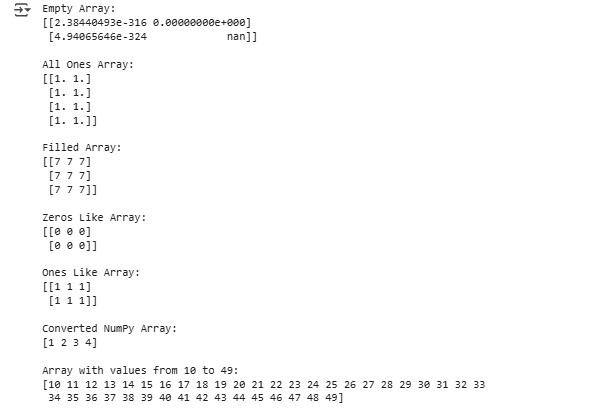
****

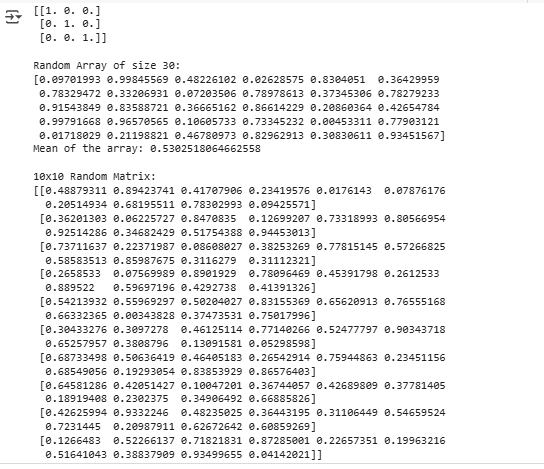
**10.1 Basic Vector and Matrix Operation with Numpy**

Problem- 1: Array Creation:

****

Problem- 2: Array Manipulation: Numerical Ranges and Array indexing:

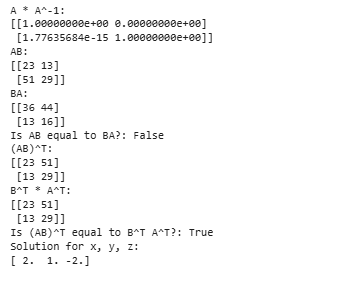
****

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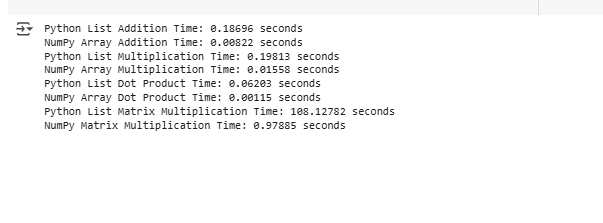
Problem- 3: Array Operations:

****

Problem- 4: Matrix Operations:

****

**10.2 Experiment: How Fast is Numpy?**

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