

Exercise 1: Write a NumPy program to create a random array with 100 real-valued elements between 1 & 5 and compute the following for this array rounded to 2 decimal places:

- average (that is, the sample mean)
- · population variance and population standard deviation (default option in NumPy)
- sample variance and sample standard deviation

Hint: For sample variance and sample standard deviation, use the ddof=1 parameter value.

Execise 2: Write a NumPy program to get the values and indices of the elements that are bigger than 10 in a given array.

Exercise 3: Write a NumPy program to find the set difference of two arrays. The set difference will return the sorted, unique values in the first array array1 that are not in the second one array2. **Hint:** This is a one-liner.

Exercise 4. Write a Numbu pregram to calculate element wice round floor calling and truncated