1. **argpartition():** NumPy has this amazing function which can find N largest values index. The output will be the N largest values index, and then we can sort the values if needed.

x = np.array([12, 10, 12, 0, 6, 8, 9, 1, 16, 4, 6, 0])

index\_val = np.argpartition(x, -4)[-4:]

index\_val

array([1, 8, 2, 0], dtype=int64)

np.sort(x[index\_val])

array([10, 12, 12, 16])

1. **allclose():**

Allclose() is used for matching two arrays and getting the output in terms of a boolean value. It will return False if items in two arrays are not equal within a tolerance. It is a great way to check if two arrays are similar, which can actually be difficult to implement manually.

array1 = np.array([0.12,0.17,0.24,0.29])

array2 = np.array([0.13,0.19,0.26,0.31])

# with a tolerance of 0.1, it should return False:

np.allclose(array1,array2,0.1)

False

# with a tolerance of 0.2, it should return True:

np.allclose(array1,array2,0.2)

True

1. **clip():**

Clip() is used to keep values in an array within an interval. Sometimes, we need to keep the values within an upper and lower limit. For the mentioned purpose, we can make use of NumPy’s clip(). Given an interval, values outside the interval are clipped to the interval edges.

x = np.array([3, 17, 14, 23, 2, 2, 6, 8, 1, 2, 16, 0])

np.clip(x,2,5)

array([3, 5, 5, 5, 2, 2, 5, 5, 2, 2, 5, 2])