np.array() np.zeros() np.ones() np.empty() np.full() np.arange() np.linspace() np.eye() np.frombuffer()
np.ones() np.empty() np.full() np.arange() np.linspace() np.eye()
np.empty() np.full() np.arange() np.linspace() np.eye()
np.full() np.arange() np.linspace() np.eye()
np.arange() np.linspace() np.eye()
np.linspace() np.eye()
np.eye()
• • •
np.frombuffer()
np.reshape()
np.ravel()
np.transpose()
np.concatenate()
np.hstack()
np.vstack()
np.split()
np.append()
np.insert()
np.add()
np.subtract()
np.multiply()
np.divide()
np.power()
np.sqrt()
np.sin()
np.mean()
np.median()
np.std()
np.var()
np.percentile()
np.dot()
np.linalg.inv()
np.linalg.eig()
np.linalg.det()
np.random.rand()
np.random.randn()
np.random.randint()
np.random.choice()
np.random.seed()
np.shape()
np.size()
np.ndim()
np.copy()
np.sort()
np.argsort()
np.searchsorted()
np.unique()

Set Operations
Set Operations

np.intersect1d()
np.setdiff1d()

Syntax Example	Description
np.array([1, 2, 3])	Create an array from a list or tuple.
np.zeros(5)	Create an array filled with zeros.
np.ones((2, 3))	Create an array filled with ones.
np.empty((2, 2))	Create an uninitialized array.
np.full((2, 2), 5)	Create an array filled with a specified value.
np.arange(10)	Create values within a specified range.
np.linspace(0, 1, 5)	Create evenly spaced values between two points.
np.eye(3)	Create an identity matrix.
np.frombuffer(b"12345", dtype=np.uint8)	Create an array from a buffer.
arr.reshape(2, 3)	Reshape an array without changing its data.
arr.ravel()	Flatten an array.
arr.T	Transpose the axes of an array.
np.concatenate((arr1, arr2))	Join arrays along an existing axis.
np.hstack((arr1, arr2))	Stack arrays horizontally.
np.vstack((arr1, arr2))	Stack arrays vertically.
np.split(arr, 3)	Split an array into multiple sub-arrays.
np.append(arr, [4, 5])	Append values to the end of an array.
np.insert(arr, 1, [1.5])	Insert values into an array at a given position.
np.add(arr1, arr2)	Element-wise addition of arrays.
np.subtract(arr1, arr2)	Element-wise subtraction of arrays.
np.multiply(arr1, arr2)	Element-wise multiplication of arrays.
np.divide(arr1, arr2)	Element-wise division of arrays.
np.power(arr, 2)	Raise array elements to a power.
np.sqrt(arr)	Compute the square root of array elements.
np.sin(arr)	Compute the sine of array elements.
np.mean(arr)	Compute the mean (average) of elements.
np.median(arr)	Compute the median of elements.
np.std(arr)	Compute the standard deviation of elements.
np.var(arr)	Compute the variance of elements.
np.percentile(arr, 50)	Compute the percentile of elements.
np.dot(arr1, arr2)	Compute the dot product of two arrays.
np.linalg.inv(arr)	Compute the inverse of a matrix.
np.linalg.eig(arr)	Compute eigenvalues and eigenvectors of a matrix.
np.linalg.det(arr)	Compute the determinant of a matrix.
np.random.rand(5)	Generate random numbers from a uniform distribution
np.random.randn(5)	Generate random numbers from a standard normal d
np.random.randint(0, 10, 5)	Generate random integers within a range.
np.random.choice([1, 2, 3], 5)	Randomly select elements from an array.
np.random.seed(42)	Set the seed for reproducibility of random numbers.
arr.shape	Get the shape of an array.
arr.size	Get the total number of elements in an array.
arr.ndim	Get the number of dimensions of an array.
np.copy(arr)	Create a copy of an array.
np.sort(arr)	Sort the elements of an array.
np.argsort(arr)	Get the indices that would sort an array.
np.searchsorted(arr, 3)	Find indices where elements should be inserted to ma
np.unique(arr)	Find the unique elements of an array.
	a a a a a contained of an array.

np.intersect1d(arr1, arr2)
np.setdiff1d(arr1, arr2)

Find the intersection of two arrays. Find the set difference of two arrays.

