Mini Test-2

Q1. What does np.array() do in numpy?

1. Reshapes an array to a specified shape.
2. Converts a list into a 1-D array.
3. Computes the dot product of two arrays.
4. Finds the cumulative sum of elements along a specified axis.

Answer: B)

Q2. What is the output of the following numpy code snippet?

import numpy as np

arr = np.array([[1, 2], [3, 4]])

mask = arr > 2

result = arr[mask]

print(result)

A) [3, 4]

B) [1, 2, 3, 4]

C) [False, False, True, True]

D) Error

Answer: A) [3, 4]

Q3. What is the output of the following numpy code snippet?

import numpy as np

arr = np.array([1, 2, 3, 4, 5])

mask = arr % 2 == 0

result = np.where(mask, arr \* 2, arr)

print(result)

A) [1, 4, 3, 8, 5]

B) [1, 4, 3, 8, 10]

C) [2, 4, 6, 8, 10]

D) [1, 4, 9, 16, 25]

Answer: A) [1, 4, 3, 8, 5]

Q4. What does np.arange(1, 10, -2) create in numpy?

1. An array with elements [1, 3, 5, 7, 9].
2. An array with elements [1, 2, 3, 4, 5, 6, 7, 8, 9].
3. An array with elements [10,8,6,4,2].
4. An empty array with no element.
5. An error will come.

Answer D) An empty array with no element.

Q5. What is the output of the following numpy code snippet?

import numpy as np

arr1 = np.array([1, 3, 2])

arr2 = np.array([4, 5])

result = np.concatenate((arr1, arr2))

print(result)

A) [1, 3, 2, 4, 5]

B) [1, 2, 3, 4, 5]

C) [[1, 3, 2], [4, 5]]

D) Error

Answer: A) [1, 3, 2, 4, 5]

Q6. What does np.sort() do in numpy?

1. Sorts elements of an array.
2. Returns the indices that would sort an array.
3. Returns the indices of maximum values in an array.
4. Merges two arrays into one.

Answer: A) Returns the indices that would sort an array

Q7. What is the output of the following numpy code snippet?

import numpy as np

arr = np.array([[3, 2,5], [1, 4,6],[2, 5,4]])

result = np.sort(arr,axis=0)

result

A) Exception will come

B) [[2, 3, 5],

[1, 4, 6],

[2, 4, 5]]

C) [1, 2, 2, 3, 4, 4, 5, 5, 6]

D [[1, 2, 4],

[2, 4, 5],

[3, 5, 6]]

Answer: D

Q8. What does np.concatenate() do in numpy?

1. Sorts elements of an array.
2. Appends values to the end of an array.
3. Merges two arrays into one along a specified axis.
4. Finds the indices that would sort an array.

Answer: C) Merges two arrays into one along a specified axis.

Q9. What does np.dot() compute in numpy?

1. Computes the dot product of two arrays.
2. Computes the union of two arrays.
3. Computes the element-wise product of two arrays.
4. Computes the inverse of an array.

Answer: A) Computes the dot product of two arrays.

Q10. What is the output of the following numpy code snippet?

import numpy as np

arr = np.array([2, 1, 2, 3, 1, 2, 3, 1])

test1 = np.unique(arr)

print(test1)

A) [1, 2, 3]

B) [1, 1, 1, 2, 2, 2, 3, 3]

C) [2, 1, 3]

D) [2, 1, 3], [2, 3, 3]

Answer: A) [1, 2, 3]