NumPy Array Attributes – Interview & Coding Questions

This document contains important NumPy Array Attributes commonly asked in Data Analyst interviews, along with examples and coding practice questions.

1 NumPy Array Attributes

- shape → Returns the number of rows and columns of the array as a tuple.
- ndim → Shows the number of dimensions (axes) of the array.
- size → Tells the total number of elements in the array.
- dtype → Shows the data type of each element in the array.
- itemsize → Shows the size in bytes of each element in the array.

Interview Questions

Q: What does .shape return?.

Q: What does .ndim tell you?

Q: What does .size return?

Q: What is .dtype used for?

Q: What is .itemsize?

Q: If array has shape (3,4), what is its size?

Q: What will .shape return for 1D array?

Q: Can we change array shape using .shape?

Q: Why is .dtype important for data analysts?

Q: What is relation between .size, .shape, and .ndim?

Practice Coding Questions

- 1 Create a NumPy array of shape (3,4). Print .shape, .ndim, .size, .dtype, .itemsize.
- 2 Create a 1D array of 10 numbers using np.arange() and check its .shape and .ndim.
- 3 Create a 3D array of 2×3×4 and print its .shape, .ndim, .size.
- 4 Create an array of float numbers and display .dtype and .itemsize.
- 5 Convert an array's data type from int to float and print new .dtype.