

NumPy Quiz

Question 1:

What is a correct syntax to create a NumPy array?

- a) `np.array([1, 2, 3, 4, 5])` Your answer
- b) `np.createArray([1, 2, 3, 4, 5])`
- c) `np.object([1, 2, 3, 4, 5])`

Question 2:

Which of the following arrays is a two dimensional (2-D) array?

- a) `[[1, 2, 3], [4, 5, 6]]` Your answer
- b) `[1, 2, 3, 4, 5]`
- c) `42`

Question 3:

What is a correct syntax to check the number of dimensions in an array?

- a) `arr.ndim` Your answer
- b) `arr.dim`
- c) `arr.ndim()`
- d) `arr.dim()`

Question 4:

What is a correct syntax to print the first item of an array?

- a) `print(myArr[0])` Your answer
- b) `print(myArr[1])`
- c) `print(myArr,1)`

Question 5:

What is a correct syntax to print the number 8 from the array below:

- a) `arr = np.array([[1,2,3,4,5], [6,7,8,9,10]])`
- b) `print(arr[1, 2])` Your answer
- c) `print(arr[7, 2])`
- d) `print(arr[3, 0])`

Question 6:

What is a correct syntax to print the numbers [3, 4, 5] from the array below:

- `arr = np.array([1,2,3,4,5,6,7])`
- a) `print(arr[2:5])` Your answer
 - b) `print(arr[3:6])`
 - c) `print(arr[2:6])`
 - d) `print(arr[2:4])`

Question 7:

Which syntax would print the last 4 numbers from the array below:

- `arr = np.array([1,2,3,4,5,6,7])`
- a) `print(arr[:4])`
 - b) `print(arr[4])`
 - c) `print(arr[3:])` Your answer
 - d) `print(arr[4:])`

Question 8:

Which syntax would print every other item from the array below:

```
arr = np.array([1,2,3,4,5,6,7])
```

- a) `print(arr[::2])` Your answer
- b) `print(arr(0: step = 2))`
- c) `print(arr[1:3:5:7])`

Question 9:

What is a correct syntax to check the data type of an array?

- a) `arr.dtype` Your answer
- b) `arr.type`
- c) `arr.ctype`
- d) `arr.datatype`

Question 10:

What is a correct syntax to create an array of type float?

- a) `arr = np.array([1, 2, 3, 4], dtype='f')` Your answer
- b) `arr = np.array([1, 2, 3, 4]).toFloat()`
- c) `arr = np.float([1, 2, 3, 4])`

Question 11:

Only one of the following statements is true when it comes to Views in NumPy, which one?

- a) The view SHOULD be affected by the changes made to the original array. Your answer
- b) The view SHOULD NOT be affected by the changes made to the original array.

Question 12:

Only one of the following statements is true when it comes to Copies in NumPy, which one?

- a) The copy SHOULD NOT be affected by the changes made to the original array. Your answer

- b) The copy SHOULD be affected by the changes made to the original array.

Question 13:

In NumPy, what does the SHAPE of an array mean?

- a) The shape is the number of elements in each dimension. Your answer
- b) The shape is the number of columns.
- c) The shape is the number of rows.

Question 14:

What is a correct syntax to return the shape of an array?

- a) `arr.shape` Your answer
- b) `shape(arr)`
- c) `arr.shape()`

Question 15:

What is a correct method to join two or more arrays?

- a) `concatenate()` Your answer
- b) `join()`
- c) `array_join()`

Question 16:

What is a correct method to split arrays?

- a) `array_split()` Your answer
- b) `hstack()`
- c) All the other 3 answers are correct
- d) `vstack()`

Question 17:

What is a correct method to search for a certain value in an array?

- a) `where()` Your answer
- b) `search()`
- c) `find()`

Question 18:

What is a correct syntax to return the index of all items that has the value 4 from the array below:

`aarr = np.array([1,4,3,4,5,4,4])`?

- a) `np.where(arr == 4)` Your answer
- b) `arr.where()`
- c) `arr.search(4)`

Question 19:

What is a correct method to sort the elements of an array?

- a) `sort()` Your answer
- b) `order()`
- c) `orderby()`

Question 20:

When using the NumPy random module, how can you return a random number from 0 to 100?

- a) `random.randint(100)` Your answer
- b) `random.rand(100)`
- c) `random.rand()`

Question 21:

When using the NumPy random module, how can you return a Normal Data Distribution with 1000 numbers, concentrated around the number 50, with a standard deviation of 0.2?

- a) `random.normal(size=1000, loc=50, scale=0.2)` Your answer

- b) `random.normal(size=1000, normal=50, s=0.1)`
- c) `random.normal(size=1000, mean=50, deviation=0.2)`

Question 22:

What is a correct syntax to mathematically add the numbers of arr1 to the numbers of arr2?

- a) `np.add(arr1, arr2)` Your answer
- b) `sum(arr1, arr2)`
- c) `np.append(arr1, arr2)`

Question 23:

What is a correct syntax to subtract the numbers from arr1 with the numbers from arr2?

- a) `np.subtract(arr1, arr2)` Your answer
- b) `np.sub(arr1, arr2)`
- c) `np.minus(arr1, arr2)`
- d) `np.min(arr1, arr2)`

Question 24:

What is a correct method to round decimals in NumPy?

- a) `np.around()`
- b) `np.fix()`
- c) `np.trunc()`
- d) All the other 3 are rounding methods in NumPy Your answer

Question 25:

What would be the answer of this cummulative summation in NumPy?

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

- a) `[1 3 6]` Your answer
- b) `[3 6 9]`

c) [9]

d) [6]

Source: <https://www.w3schools.com/quiztest/quiztest.asp?qtest=NUMPY>