1. What will be the output of following code:

>>> a = [2,3,4,5,6]

>>> b = [2,5,8,5,3]

* 1. a+b
  2. np.array(a)+np.array(b)
  3. a\*b
  4. np.array(a)\*\*np.array(b)

Answers:

* 1. [2,3,4,5,6,2,5,8,5,3]
  2. Array([4,8,12,10,9])
  3. Error
  4. Array([element wise power])

1. What is the dimension of these arrays:

2.1 array(45)

2.2 array([42, 34, 45])

2.3 array([[[1, 2, 3],

[4, 5, 6]],

[[1, 2, 3],

[3, 4, 5]]])

2.4 array([[[[[1, 2, 3, 4, 5, 6], [2, 3, 4, 5, 6, 7]]]]])

Answers:

2.1= 0

2.2= 1

2.3 = 3

2.4= 5

1. For array np.linspace(start,stop,number of points), which of the following is correct statement:
2. Starting point is not included
3. Stopping point is not included
4. Both starting and stopping point are not included
5. Both starting and stopping point are included

Answer: d

1. For array: perm = np.array([[13,23,32,43,54],[43,55,60,7,8],[12,34,45,77,87],[2,55,39,82,49]]), slice the part containing array([[60, 7],[45, 77]])

Answer: perm\_sliced = perm[1:3,2:4]

1. Generate:

5.1 1000 Random number following normal distribution with mean as 7, and standard deviation as 3.

5.2 1000 Random number from 20 to 30 following uniform distribution

5.3 1000 Random number following standard normal distribution

Answer:

5.1 np.random.normal(loc = 7,scale = 3,size=(1000))

5.2 np.random.uniform(20,30,1000)

5.3 np.random.randn(1000)