Assignment 1

Due on 2021-02-03, 23:59 IST.

The data type for submitting this assignment has changed.

As per our records you have not submitted this assignment.

1. The numpy library in Python is used for working with ________
   1 point
   a. Arrays
   b. Matrices
   c. Linear algebra
   d. Fourier transforms

   Accepted Answers:
   a. Arrays
   b. Matrices
   c. Linear algebra
   d. Fourier transforms

2. A 2D array is defined as x = np.identity(5), what will be the output of the command np.shape(x) ?
   1 point
   a. (5, 5)
   b. (0, 0)
   c. (0, 5)
   d. (5, 0)

   Accepted Answers:
   a. (5, 5)

3. If the following is related to the concept np.inspace
   1 point
   a. Geometric progression
   b. Arithmetic progression
   c. Both a and b
   d. None of the above

   Accepted Answers:
   c. Both a and b

4. What is the command for generating 5 random values drawn from a normal distribution with mean equal to 0 and variance equal to 1 ?
   1 point
   a. np.random.random(5, 0, 1)
   b. np.random.normal(0, 1, 5)
   c. np.random.normal(1, 0, 5)
   d. np.random.uniform(0, 1)

   Accepted Answers:
   b. np.random.normal(0, 1, 5)

5. Which of the following perform matrix multiplication in Python when A and B are matrices
   1 point
   a. A * B
   b. A % B
   c. A % B
   d. A * B

   Accepted Answers:
   a. A * B

6. If a Python array indexing starts from ________ and ends at ________, where n is the number of elements in that array
   1 point
   a. 1 and n
   b. 0 and n
   c. 1 and n+1
   d. 0 and n+1

   Accepted Answers:
   a. 1 and n

7. What will be the command to generate a 10x10 array of ones with float data type in Python?
   1 point
   a. np.random.randint(0, 1, (10, 10))
   b. np.random.uniform(0, 1, (10, 10))
   c. np.random.random(10, 10)
   d. np.random.uniform(0, 1, (10, 10))

   Accepted Answers:
   b. np.random.uniform(0, 1, (10, 10))

8. For a matrix C what is the command for sorting the matrix column-wise?
   1 point
   a. np.random.randint(0, 1, (10, 10))
   b. np.random.randint(0, 1, (10, 10))
   c. np.random.randint(1, 10, (10, 10))
   d. np.random.randint(0, 1, (10, 10))

   Accepted Answers:
   d. np.random.randint(0, 1, (10, 10))

9. In Python ________ is used to define the complete path of a complex number
   1 point
   a. i
   b. A
   c. x, y
   d. any of the above

   Accepted Answers:
   c. x, y

10. In the following function definition ________ is the name of the function and ________ is the input to the function.
    1 point
    a. def, return
    b. def, arguments
    c. def, x
    d. def, any

    Accepted Answers:
    b. def, arguments

11. What is the function used to check whether all the elements of array A are equal to that of array B in python?
    1 point
    a. np.array
    b. np.subtract
    c. np.array_equal
    d. np.subtract

    Accepted Answers:
    c. np.array_equal

12. To compute the double dot product of two matrices which python function should be used?
    1 point
    a. np.dot
    b. np.multiply
    c. np.tensor
    d. np.dot

    Accepted Answers:
    a. np.dot