

Course outline

How does an NPTEL online course work?

Assignment 0

Lecture Material

Week 1

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Assignment 1

The due date for submitting this assignment has passed.

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

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 transform

No, the answer is incorrect.
Score: 0

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

2) A 1D array is defined as a = np.ndarray(8, dtype=float), what will be the output of the command np.shape(a) ? **1 point**

- a. (8)
 b. (8,)
 c. (8,1)
 d. (1,8)

No, the answer is incorrect.
Score: 0

Accepted Answers:
b. (8,)

3) Which of the following is related to the command np.linspace **1 point**

- a. Geometric progression
 b. Arithmetic progression
 c. Both a and b
 d. None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
b. Arithmetic progression

4) What is the command for generating 7 random values drawn from a normal distribution with mean equal to 0 and variance equal to 1? **1 point**

- a. np.random.normal(7, 0, 1)
 b. np.randn(7, 0, 1)
 c. np.random.normal(0, 1, 7)
 d. np.randn(0, 1, 7)

No, the answer is incorrect.
Score: 0

Accepted Answers:
c. np.random.normal(0, 1, 7)

5) Which of the following performs matrix multiplication in python when A and B are matrices **1 point**

- a. A*B
 b. A**B
 c. np.dot(A,B)
 d. np.multiply(A,B)

No, the answer is incorrect.
Score: 0

Accepted Answers:
c. np.dot(A,B)

6) In python the 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)

No, the answer is incorrect.
Score: 0

Accepted Answers:
d. 0 and (n-1)

7) What will be the command to generate a 1D array of size 6 with float data type in python? **1 point**

- a. np.ndarray(6,type=float)
 b. np.array(6,type=float)
 c. np.ndarray(6,dtype=float)
 d. np.array(6,dtype=float)

No, the answer is incorrect.
Score: 0

Accepted Answers:
c. np.ndarray(6,dtype=float)

8) For a matrix C what is the command for sorting the matrix column-wise? **1 point**

- a. np.sort(C,axis=0)
 b. np.sort(C,axis=1)
 c. np.sort(C,axis=[0,1])
 d. np.sort(C,axis=[1,0])

No, the answer is incorrect.
Score: 0

Accepted Answers:
b. np.sort(C,axis=1)

9) In python _____ is used to define the complex part of a complex number. **1 point**

- a. i
 b. j
 c. k
 d. any of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
b. j

10) In the following function definition _____ is the name of the function and _____ is the input to the function. **1 point**

```
def circ_properties(r):
    area = np.pi*r**2;
    circ = 2*np.pi*r;
    return area, circ
```

- a. np.pi, r
 b. r, circ_properties
 c. area, circ
 d. circ_properties, r

No, the answer is incorrect.
Score: 0

Accepted Answers:
d. circ_properties, r

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.allcls(A,B)
 b. np.allclose(A,B)
 c. allcls(A,B)
 d. allclose(A,B)

No, the answer is incorrect.
Score: 0

Accepted Answers:
b. np.allclose(A,B)

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.tensordot
 d. np.doubledot

No, the answer is incorrect.
Score: 0

Accepted Answers:
c. np.tensordot