**Python Assignment: 4**

* Create a one dimensional array with the following values 1, 4, 3 and print the values.

--->[1 4 3]

* Create a one dimensional array with the following values 1, 4, 3 and print the type of the array.

---><class 'numpy.ndarray'>

* Create a two dimensional array with the following format: [(1, 2, 3), (4, 5, 6)] and print the values.

--->[[1 2 3]

[4 5 6]]

* Create a two dimensional array with the following format: [(1, 2, 3), (4, 5, 6)] and print the type of the array.

---><class 'numpy.ndarray'>

* Create a one dimensional array with the following values 1, 4, 3 and print the dimension of the array.

--->1

* For the same one dimensional array find the byte size of an each element.

--->8

* For the same one dimensional array find the data type of an each element.

--->int64

* For the same one dimensional array find the size of an array.

--->3

* Create an array with np.zeros as 3, 3 values and print it.

--->[[0. 0. 0.]

[0. 0. 0.][0. 0. 0.]]

* Create an array with np.ones as 3, 3 values and print it.

--->[[1. 1. 1.][1. 1. 1.]

[1. 1. 1.]]

* Find the shape of the array for the following values.

[(1, 2, 3), (4, 5, 6)]

--->(2, 3)

* Find the re shape of the array for the following values.

[(1, 2, 3), (4, 5, 6)] and reshape (4, 2) and print it.

--->cannot reshape array of size 6 into shape (4,2)

* Find the slice of an array for the following values.

[(1, 2, 3), (4, 5, 6)] and a [0:, 2] and print it.

--->[3 6]

* Print the linspace for the values (1, 2, 5).

--->[1. 1.5 2. 2.5 3. ]

* Find the sum, max, min of an array for the following values [(1,2,3),(3,4,5)].

--->1

5

* Find the column wise and row wise sum of an array for the following values [(1, 2, 3), (3, 4, 5)].

--->18

* Find the transpose of an array [[1,2,3],[3,4,5],[9,6,0]] and print it.

--->[[1 3 9][2 4 6][3 5 0]]

* Find the row wise sort and column wise sort for the following values [[1,4,2],[3,4,6],[0,-1,5]] and print it.

--->[[ 1 2 4]

[ 3 4 6]

[-1 0 5]]

[[ 0 -1 2][ 1 4 5]

[ 3 4 6]]

* Find the horizontal split and vertical split for the following values

[[1,3,5,7,9,11],[2,4,5,8,10,12]] and print it.

--->[array([[1, 3],

[2, 4]]), array([[5, 7],

[5, 8]]), array([[ 9, 11],

[10, 12]])]

[array([[ 1, 3, 5, 7, 9, 11]]), array([[ 2, 4, 5, 8, 10, 12]])]

* Find the vstack and hstack for the following values

a=np.array([(1,2,3),(3,4,5)])

b=np.array([(1,2,3),(3,4,5)]) and print it.

--->[[1 2 3]

[3 4 5]

[1 2 3]

[3 4 5]]

[[1 2 3 1 2 3][3 4 5 3 4 5]]