Lesson 3

1. What will be output of the following code

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| import numpy as np  myarray = np.ones((4,2,2))  myarray[3,0,1] = 10  myarray[1,1,1] = 20  myarray = myarray \* 2  myarray.resize(8,2)  print(myarray)  print(np.shape(myarray)) |
| Output:  [2,2]  [2,2]  [2,2]  [2,40]  [2,2]  [2,2]  [2,20]  [2,2]  [[ 2. 2.]  [ 2. 2.]  [ 2. 2.]  [ 2. 40.]  [ 2. 2.]  [ 2. 2.]  [ 2. 20.]  [ 2. 2.]]  (8, 2) |

1. The following code creates three arrays ar1, ar2, ar3 modify the code as:
2. Plot ar1 as red line as 1st plot in a 1 row 3 columns subplot.
3. Plot ar2 as blue squares as 2nd plot in a 1 row 3 columns subplot.
4. Plot ar3 as squares as 3rd plot in a 1 row 3 columns subplot.

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| --- |
| import numpy as np  import matplotlib.pyplot as plt  ar1 = np.arange(0., 5., 0.2)  ar2 = ar1\*\*2  ar3 = ar1\*\*3  x\_values = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25]  plt.figure(1)  # Part i  # Part ii  # Part iii  plt.show() |