

Numpy assignment

Estimated completion time : 45 mins

1. `a = [10,12,19,17,-13,18,27,30,-12,-27]`

Convert the above list into a NumPy array and filter out the numbers with absolute value(modulus value) less than 20

2. Create a NumPy array with the dimensions 10,2,5 using the `arrange` function

3. Write a NumPy program to create a vector with values from 0 to 20 and change the sign of the numbers in the range from 9 to 15

4. Write a NumPy program to create a 3x4 matrix filled with values from 10 to 21

5. Write a NumPy program to create a 5x5 zero matrix with elements on the main diagonal equal to 1, 2, 3, 4(Hint: Google how to change individual values in np array)

6. Write a NumPy program to multiply two given arrays of the same size element-by-element

7. Write a NumPy program to create an array of equal shapes and data types of a given array

Please complete it and send me the pdf(by using `ctrl + p` on the notebook) on the teams