Numpy, OpenCV-Python

1. Have a look at following tutorials:
    a. https://docs.scipy.org/doc/numpy/user/quickstart.html
    b. http://cs231n.github.io/python-numpy-tutorial/#numpy
    c. https://docs.scipy.org/doc/numpy/reference/arrays.indexing.html
    d. https://realpython.com/numpy-array-programming/
    e. https://opencv-python-tutroals.readthedocs.io/en/latest/py_tutorials/py_tutorials.html
2. Write a NumPy program to create an array of the integers from 30 to 70.
3. Write a NumPy program to create a 3x3 identity matrix.
4. 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.
5. Write a NumPy program to create a 10x10 matrix, in which the elements on the borders will be equal to 1, and inside 0.
6. Write a NumPy program to compute the inner product of two given vectors.
7. Write a NumPy program compare two arrays using numpy.
8. Write a NumPy program to get the values and indices of the elements that are bigger than 10 in a given array.
9. Use the given image for finding table borders using OpenCV. You are free to do any Image Processing. At the end you should find border coordinates and draw **red lines (thickness=5)**. You should send me also final image (with drawn red lines).
10. ***Bonus:*** Use the same image from previous example to find out textual lines. You should get each line coordinates and draw rectangles bordering each textual line (as we did during lecture). You should send me also final image.

You should send me the file with examples, file should be named:
“name_surname_hw_numpy_open_cv.py”.