Hometask №4

Problem №1

Build a convolutional neural network with the given parameters.

Network architecture: conv1 (3 filter sizes (5, 5)) -> maxpool1 (core size 2) -> conv2 (5 filter sizes (3, 3)) -> maxpool2 (core size 2)-> flatten -> fc1 (100 output neurons) -> fc2 (10 neurons by result)

The neural network should work with 32x32 images. Any additional fiber parameters, except for the above, do not need to be set.

Problem №2

Your main task: to implement the entire model training pipeline and achieve a good value of the accuracy metric on the test set Points for the task:

- 0 if accuracy on the test set <0.5;

- 0.5 if accuracy on the test set is >0.5 and <0.56;

- 1 if accuracy on the test set is >0.56;

Experiment with the parameters of the neural network to get the required accuracy.