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**BT – Thực hành 03**

Q1.

function TH03\_Q1(n)

fprintf('\n Load du lieu train');

imgTrainAll = loadMNISTImages('./train-images.idx3-ubyte');

lblTrainAll = loadMNISTLabels('./train-labels.idx1-ubyte');

fprintf('\n Load du lieu test');

imgTestAll = loadMNISTImages('./t10k-images.idx3-ubyte');

lblTestAll = loadMNISTLabels('./t10k-labels.idx1-ubyte');

nTrainImages = size(imgTrainAll, 2);

nTrainLabels = size(lblTrainAll, 1);

nTestImages = size(imgTestAll, 2);

nTestLabels = size(lblTestAll, 1);

nSizeofImage = size(imgTrainAll, 1);

figure;

img = imgTrainAll(:, n);

img2D = reshape(img, 28, 28);

strLabelImage = num2str(lblTrainAll(n));

strLabelImage = [strLabelImage, '(', num2str(n),')'];

imshow(img2D);

title(strLabelImage);

end

|  |  |
| --- | --- |
| **n** | **Kết quả** |
| 1 | 5 |
| 500 | 8 |
| 5000 | 2 |
| 10000 | 7 |
| 59000 | 4 |

Q2.

function TH03\_Q2(n)

fprintf('\n Load du lieu train');

imgTrainAll = loadMNISTImages('./train-images.idx3-ubyte');

lblTrainAll = loadMNISTLabels('./train-labels.idx1-ubyte');

fprintf('\n Load du lieu test');

imgTestAll = loadMNISTImages('./t10k-images.idx3-ubyte');

lblTestAll = loadMNISTLabels('./t10k-labels.idx1-ubyte');

nTrainImages = size(imgTrainAll, 2);

nTrainLabels = size(lblTrainAll, 1);

nTestImages = size(imgTestAll, 2);

nTestLabels = size(lblTestAll, 1);

nSizeofImage = size(imgTrainAll, 1);

figure;

img = imgTestAll(:, n);

img2D = reshape(img, 28, 28);

strLabelImage = num2str(lblTestAll(n));

strLabelImage = [strLabelImage, '(', num2str(n),')'];

imshow(img2D);

title(strLabelImage);

end

|  |  |
| --- | --- |
| **n** | **Kết quả** |
| 1 | 7 |
| 500 | 6 |
| 5000 | 0 |
| 9000 | 0 |

Q3.