Histogram Equalisation: Matlab

- Consider the matrix:

0	0	1	4	4	5
0	1	3	4	3	4
1	3	4	2	1	3
4	4	3	1	0	0
5	4	2	1	0	0
5	5	4	3	1	0

- Perform Conventional Histogram Equalisation.
- Download the image from Moodle (week 9): Perform Conventional Histogram Equalisation.

Conventional HE

$$p(\mathrm{X_k}) = \aleph(\mathrm{X_k}) \Big/ \left(\sum_{k=0}^{L-1} \aleph(\mathrm{X_k}) \right) = \aleph(\mathrm{X_k})/N$$

$$c(\mathrm{X_k}) = \sum_{q=0}^{\mathrm{k}} p(\mathrm{X_q}) \qquad \forall\, k \in [0, L-1]$$

$$T(\mathrm{X_k}) = X_0 + \lfloor (X_{L-1} - X_0) \times c(\mathrm{X_k}) \rceil$$