★ Histogram Processing

1) Histogram Equalization.

Gray levels	0	1	2	3	4	5	6	7
Frequeny	123	78	281	417	639	1054	816	688

Apply histogram equalization.

→

Gray level.	Freqn	PDF $P_{nk} = \frac{n_k}{n}$	CDF	CDF $*(L-1)$ $\uparrow$ 7	Round off
0	123	0.03	0.03	0.21	0
1	78	0.019	0.049	0.343	0
2	281	0.068	0.17	0.819	1
3	417	0.101	0.218	1.526	2
4	639	0.156	0.374	2.618	3
5	1054	0.257	0.631	4.417	4
6	816	0.199	0.83	5.81	6
7	688	0.167	1	7	7

$n \Rightarrow$ 4096

O/P Histogram

Gray level	Freqn.
0	123+78=201
1	281
2	417
3	639
4	1054
5	0
6	816
7	688

I/P histogram

O/P histogram.