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Kelas : PTIK C 2020

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“Tugas 3 Pengolahan Citra Digital”

Soal!

1. Buatlah Histogram citra 3-bit dibawah Ini !

1	3	4	5
1	2	1	1
3	3	4	7
2	1	1	7

2. Cari distribusi komulatifnya (grafiknya ditampilkan)
3. Lakukan proses histogram equalisasi (tuliskan matriks citra hasil equalisasinya)

Jawaban!

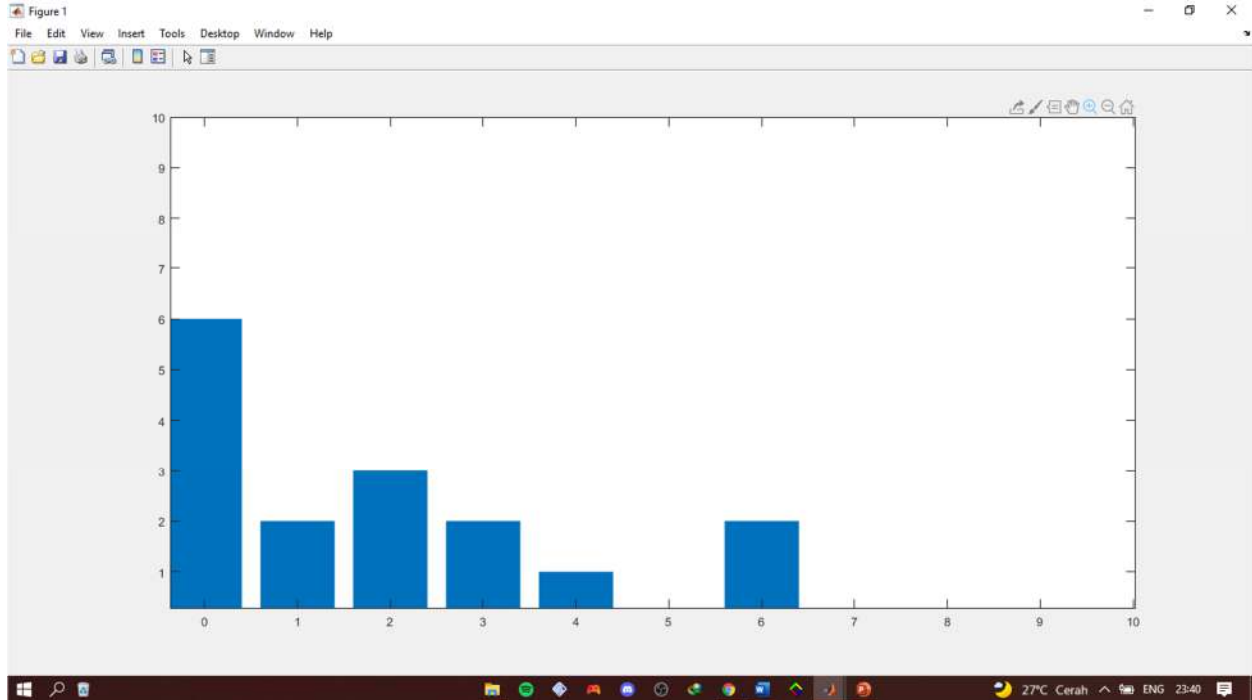
1. Program :

```
citra_a = [1 3 4 5; 1 2 1 1; 3 3 4 7; 2 1 1 7]

H = zeros(1,8)

[n m] = size(citra_a)
for x = 1:n
    for y = 1:m
        ii = citra_a(x,y);
        H(ii) = H(ii)+1;
    end
end
bar(0:7,H);
axis([0 10 0 10])
```

Grafik :



2. Distribusi Kumulatif

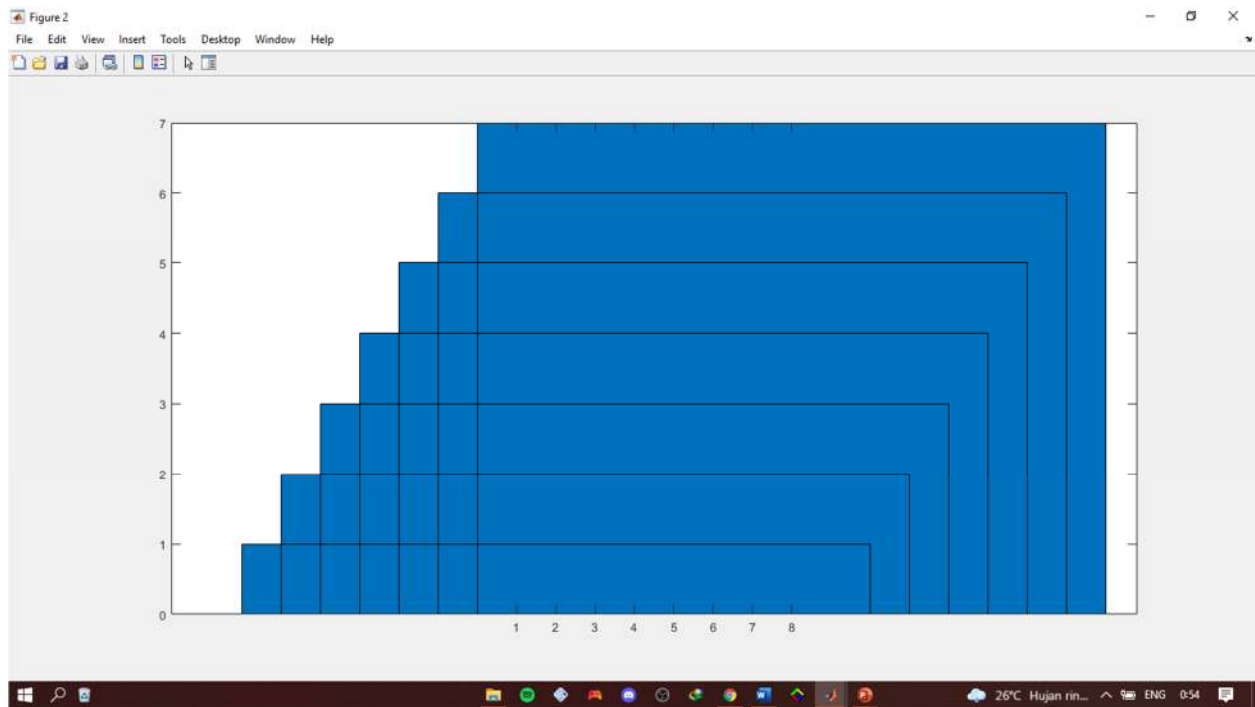
$$H(i) = 6 \ 2 \ 3 \ 2 \ 1 \ 2$$

$$C(w) =$$

- $C(1) = 6$
- $C(2) = 6 + 2 = 8$
- $C(3) = 6 + 2 + 3 = 11$
- $C(4) = 6 + 2 + 3 + 2 = 13$
- $C(5) = 6 + 2 + 3 + 2 + 1 = 14$
- $C(7) = 6 + 2 + 3 + 2 + 1 + 2 = 16$

i	H(i)	C(w)
1	6	6
2	2	8
3	3	11
4	2	13
5	1	14
7	2	16

Grafik :



3. Distribusi Equivalen

$$W_{\text{baru}} = C(w).t / n.m$$

$$W_{\text{baru}} = C(w).7 / 16$$

w	C(w)	W baru
1	6	3
2	8	4
3	11	5
4	13	6
5	14	6
7	16	7

Grafik :

