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1. Buat histogram citra 3 bit dibawah ini

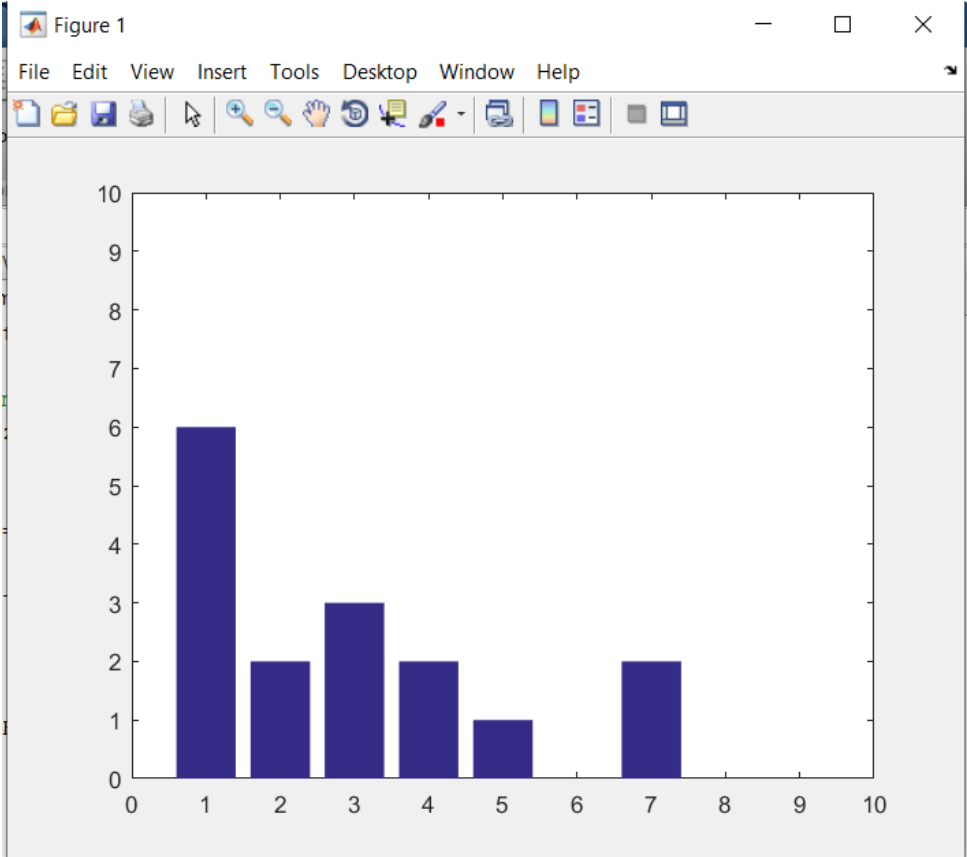
1	3	4	5
1	2	1	1
3	3	4	7
2	1	1	7

Jawaban:

Code Program:

```
Tugas3_PCD_Muhammad_Nadir_Nawi.m
1 Citra_3_bit = [1 3 4 5; 1 2 1 1; 3 3 4 7; 2 1 1 7];
2
3 % Histogram
4 [n m] = size(Citra_3_bit);
5 H = zeros(1,256);
6 for x = 1 : n
7     for y = 1: m
8         ii = Citra_3_bit(x,y);
9         H(ii+1) = H(ii+1) +1;
10    end
11 end
12 figure(1)
13 bar(0:255,H);
14 axis([0 10 0 10])
15
```

Hasil:



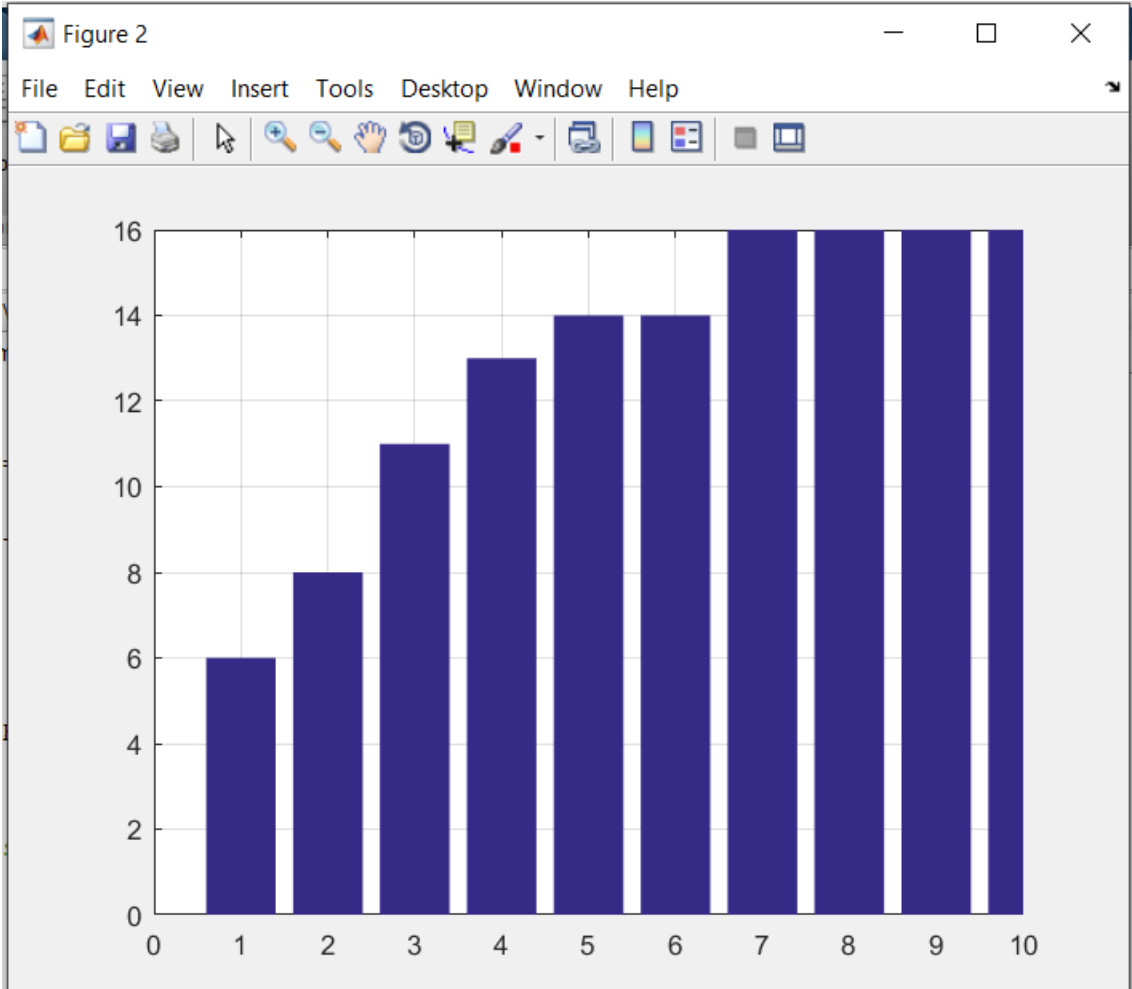
2. Cari distribusi komulatifnya (grafiknya ditampilkan)

Jawaban:

Code Program:

```
% Distribusi Komulatif
for w = 1: 256
    c(w) = sum(H(1:w));
end
figure(2)
bar(0:255,c)
grid on
axis([0 10 0 m*n])
```

Hasil:



3. Lakukan proses histogram equalisasi (tuliskan matriks citra hasil equalisasinya)

Jawaban:

Code Program:

```
% Histogram Equalisasi
for k = 1 : 256
    wb(k) = round ( c(k)*256/(m*n) );
end
figure(3)
bar(0:255,wb)
axis([0 10 0 255])
grid on

c = Citra_3_bit;
[n m] = size(c);

for x = 1 : n
    for y = 1 : m
        ii = c(x,y);
        c(x,y) = wb(ii+1);
    end
end
```

Hasil:

