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Kelas: PTIK C 2020

1. Buat histogram citra 3 bit dibawah ini
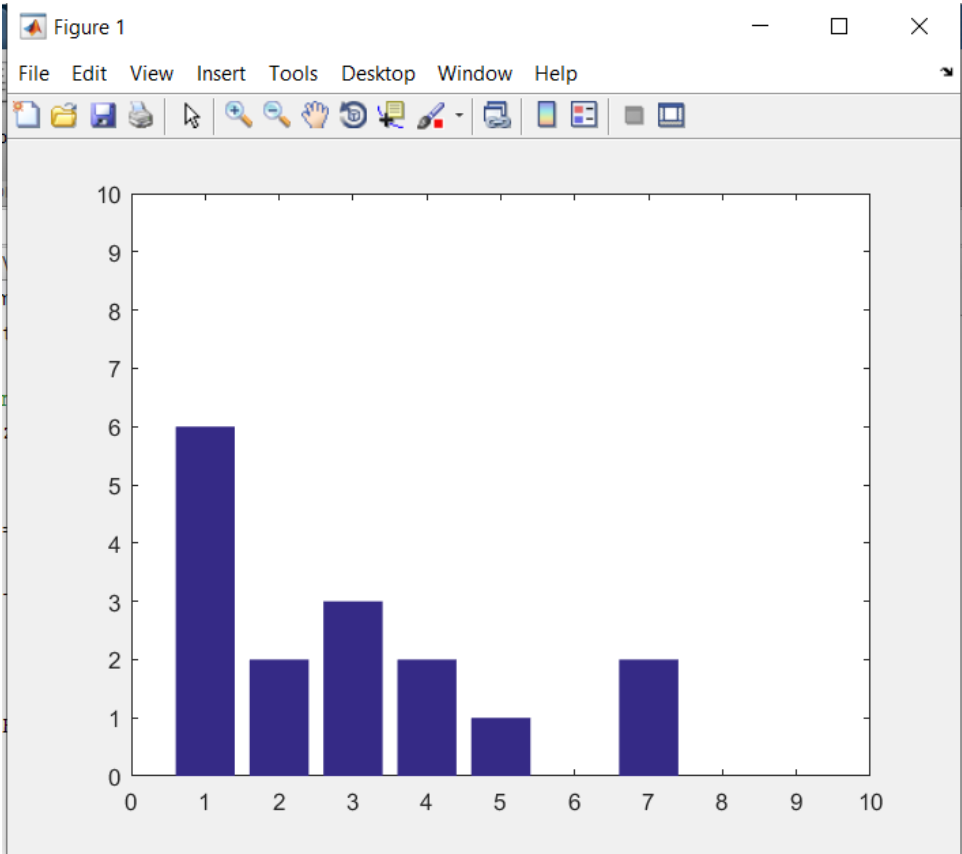
1	3	4	5
1	2	1	1
3	3	4	7
2	1	1	7

Jawaban:

Code Program:

```
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
```
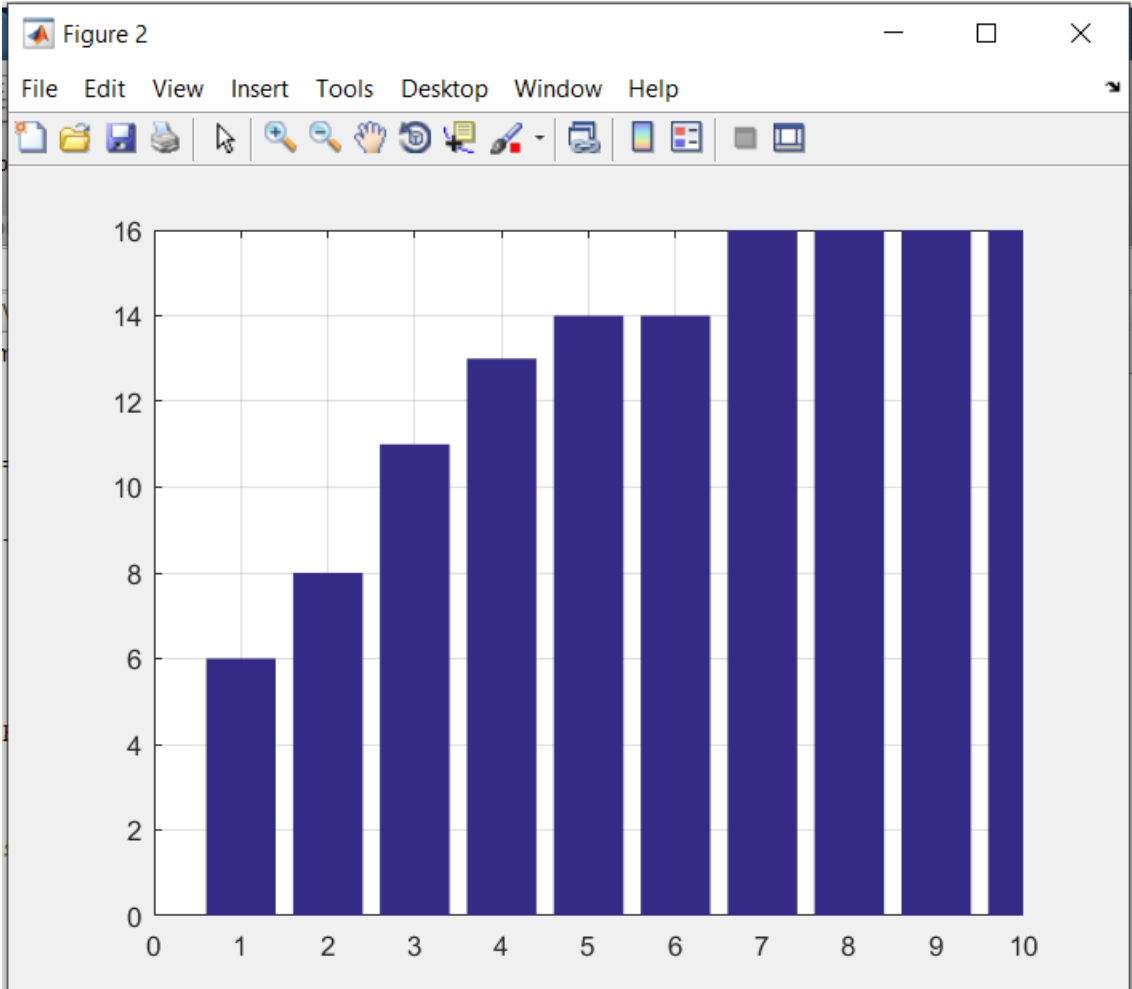
Hasil:

2. Cari distribusi komulatifnya (grafiknya ditampilkan)

Jawaban:

Code Program:

```matlab
% 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:

```matlab
26    % Histogram Equalisasi
27    for k = 1 : 256
28        wb(k) = round (c(k)*256/(m*n));
29    end
30    figure(3)
31    bar(0:255,wb)
32    axis([0 10 0 255])
33    grid on
34
35    c = Citra_3_bit;
36    [n m] = size(c);
37
38    for x = 1 : n
39        for y = 1 : m
40            ii = c(x,y);
41            c(x,y) = wb(ii+1);
42        end
43    end
44
```

Hasil: