

Nama : Rifki Andrean Julianto

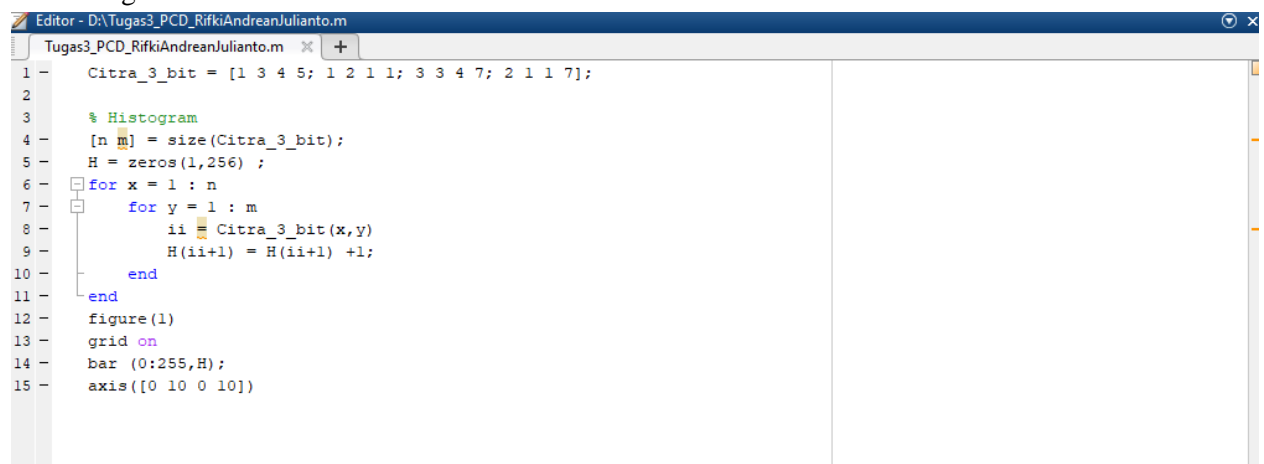
NIM : 200209502009

Kelas : PTIK C 2020

1. Buat Histogram Citra 3 bit!

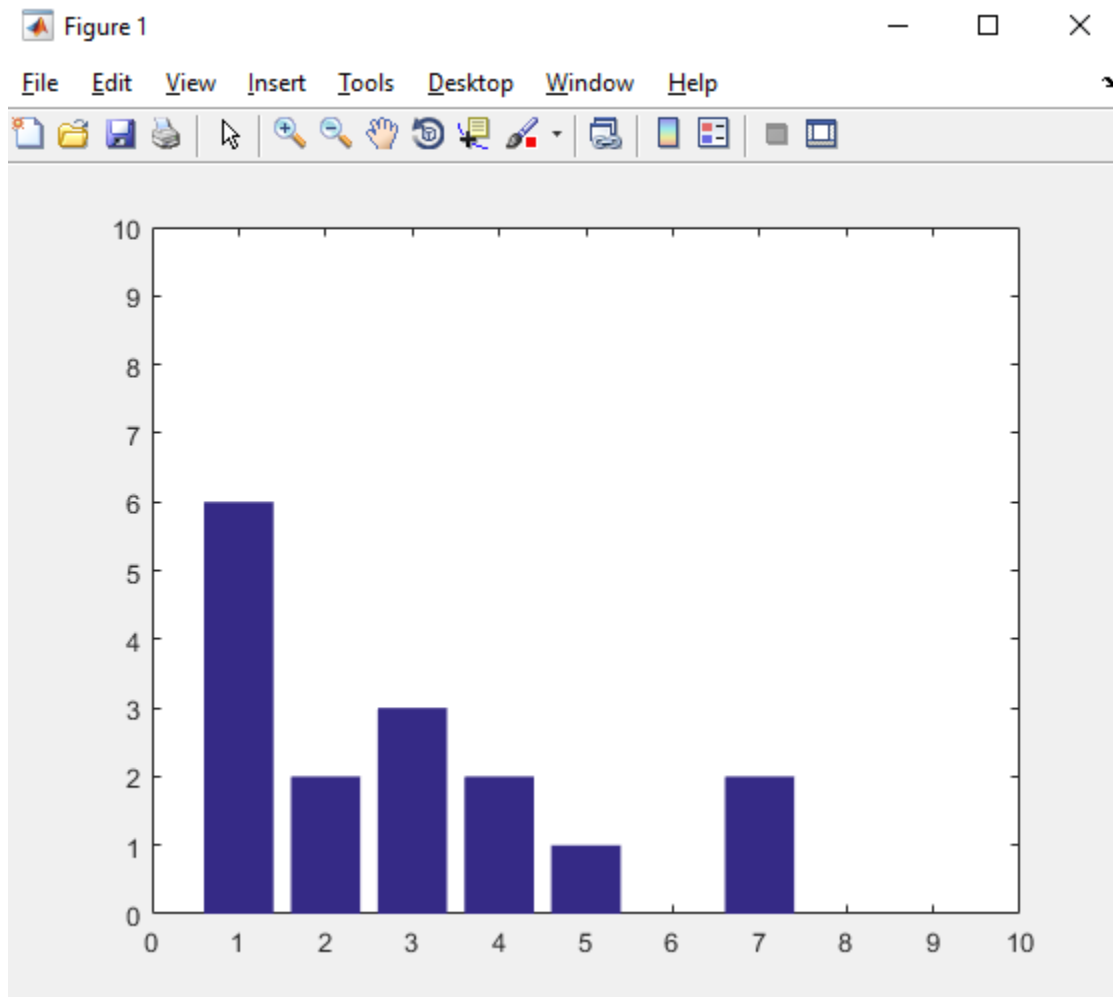
Jawaban :

Code Program

A screenshot of a MATLAB script editor window titled 'Editor - D:\Tugas3_PCD_RifkiAndreanJulianto.m'. The script defines a 3-bit image 'Citra_3_bit' as a 3x10 matrix of values. It then calculates the histogram 'H' by iterating over each pixel, counting the frequency of each value from 0 to 255. Finally, it displays the histogram using the 'bar' function with a grid and specific axis labels.

```
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 grid on
14 bar (0:255,H);
15 axis([0 10 0 10])
```

Hasil :



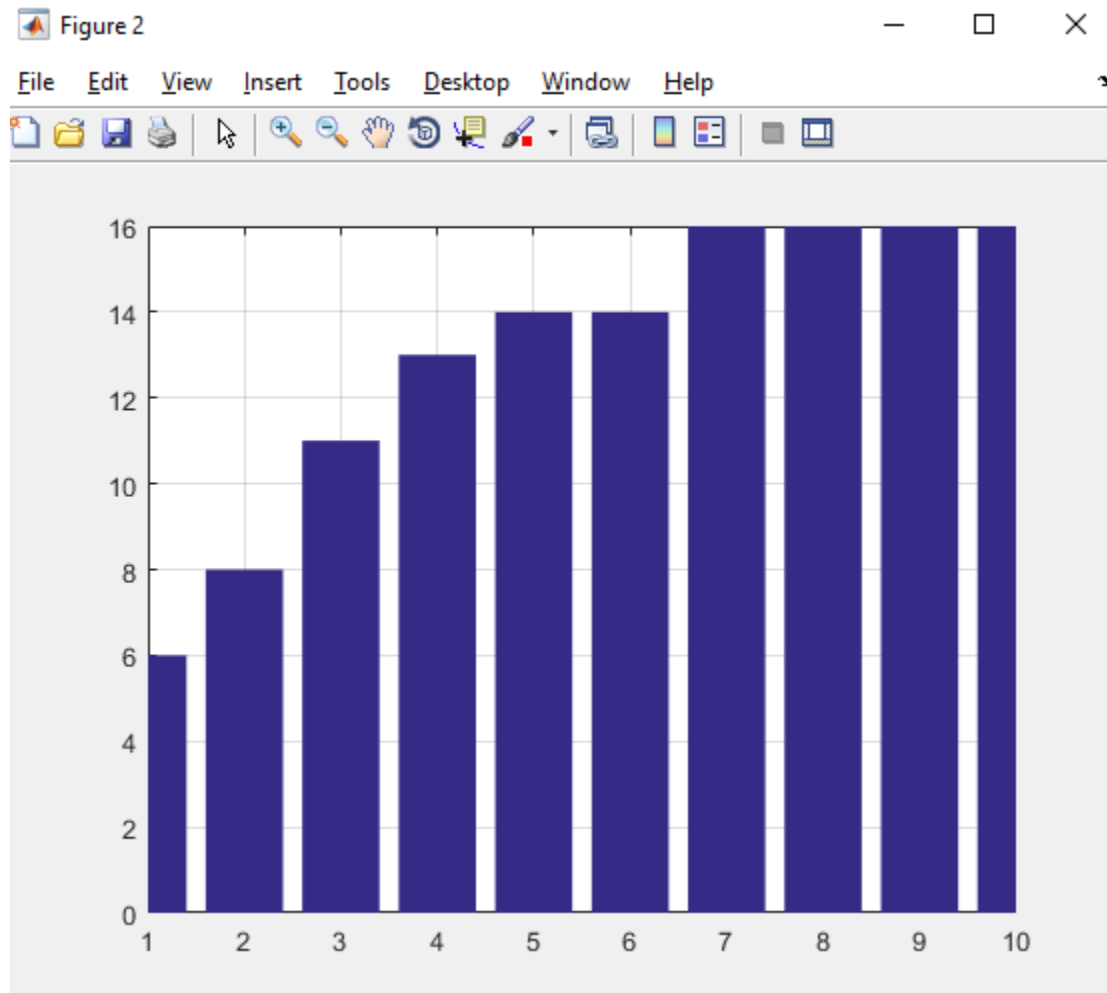
2. Cari Distribusi Kumulatif nya (Grafikny Ditampilkan)

Jawaban:

Code Program

```
Editor - D:\Tugas3_PCD_RifkiAndrianJulianto.m
Tugas3_PCD_RifkiAndrianJulianto.m
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 - grid on
14 - bar(0:255,H);
15 - axis([0 10 0 10])
16 -
17 - % Distribusi Kumulatif
18 - for w = 1: 256
19 -     c(w) = sum(H(1:w));
20 - end
21 - figure(2)
22 - bar(0:255,c)
23 - grid on
24 - axis([1 10 0 m*n])
```

Hasil



3. Lakukan Proses Histogram Equalisasi (Tuliskan matricks citra hasil equalisasinya)

Jawaban:

Code Program

```
Editor - D:\Tugas3_PCD_RifkiAndeanJulianto.m
Tugas3_PCD_RifkiAndeanJulianto.m x +
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
```

Hasil

