



**SIGNAL AND SYSTEM**

**LAB REPORT EEE221**

**CONTENT: LAB 3 & 4**

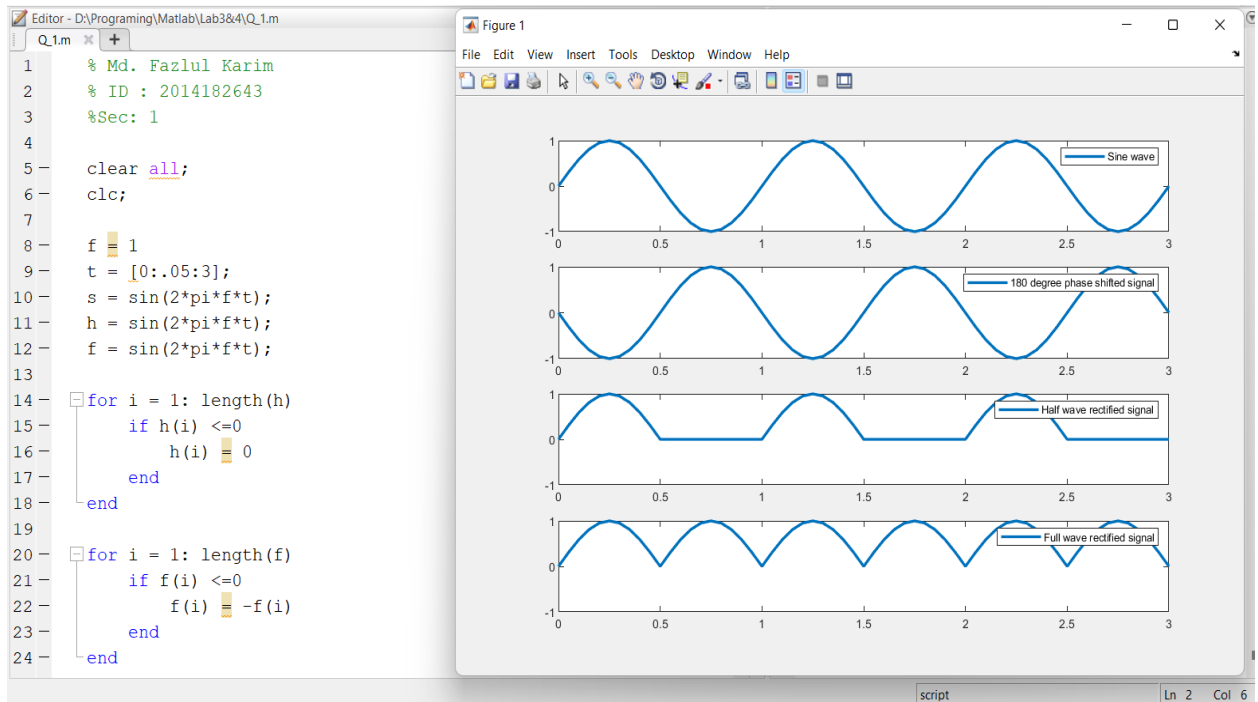
**NAME : MD. FAZLUL KARIM      SECTION : 01**

**STUDENT ID: 2014182643**

**NAME OF THE INSTRUCTOR : NAYEEM HOSSAIN MOLLAH**

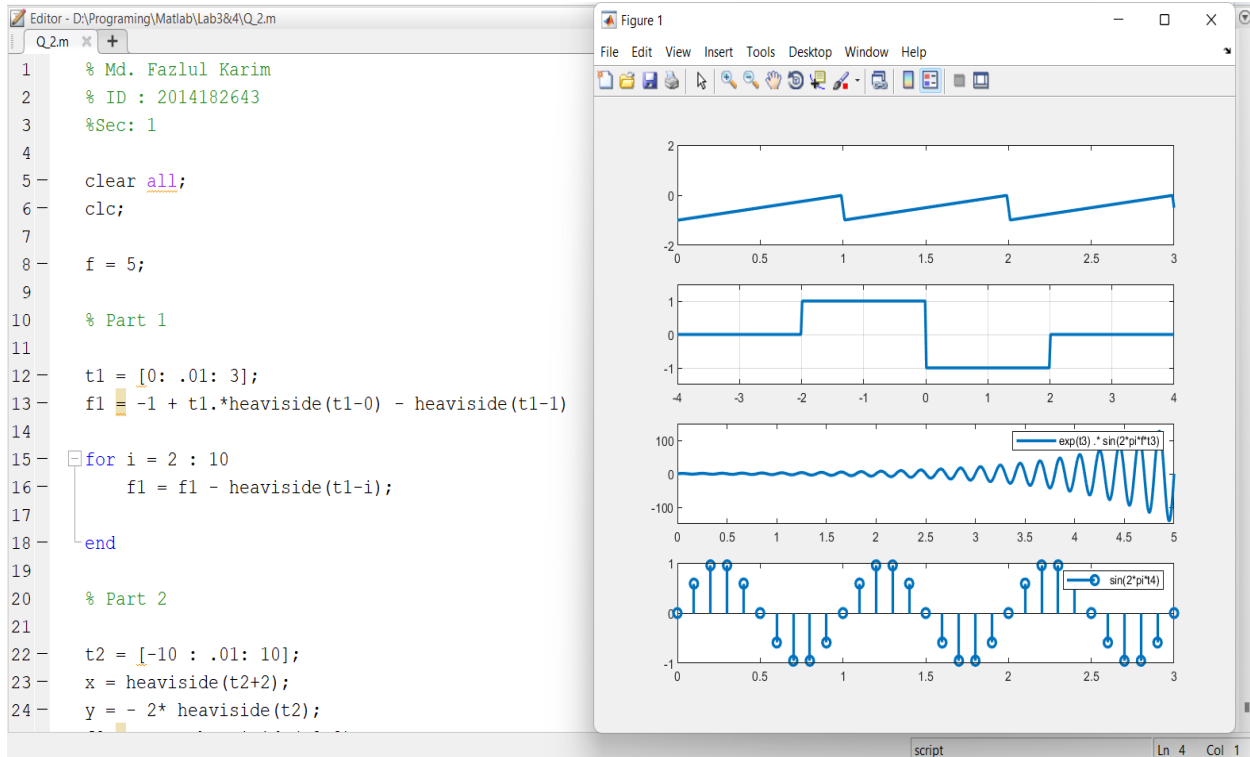
**DATE : 7/22/2022**

## Answer No – 1



```
Editor - D:\Programing\Matlab\Lab3&4\Q_1.m*
Q_1.m* x +
23 -     end
24 - end
25
26 - figure(1)
27 - subplot(4, 1, 1)
28 - plot(t, s, 'linewidth', 2)
29 - axis([0 3 -1 1])
30 - legend('Sine wave')
31 - hold on
32
33 - subplot(4, 1, 2)
34 - plot(t, -s, 'linewidth', 2)
35 - axis([0 3 -1 1])
36 - legend('180 degree phase shifted signal')
37
38 - subplot(4, 1, 3)
39 - plot(t, h, 'linewidth', 2)
40 - axis([0 3 -1 1])
41 - legend('Half wave rectified signal')
42
43 - subplot(4, 1, 4)
44 - plot(t, f, 'linewidth', 2)
45 - axis([0 3 -1 1])
46 - legend('Full wave rectified signal')
```

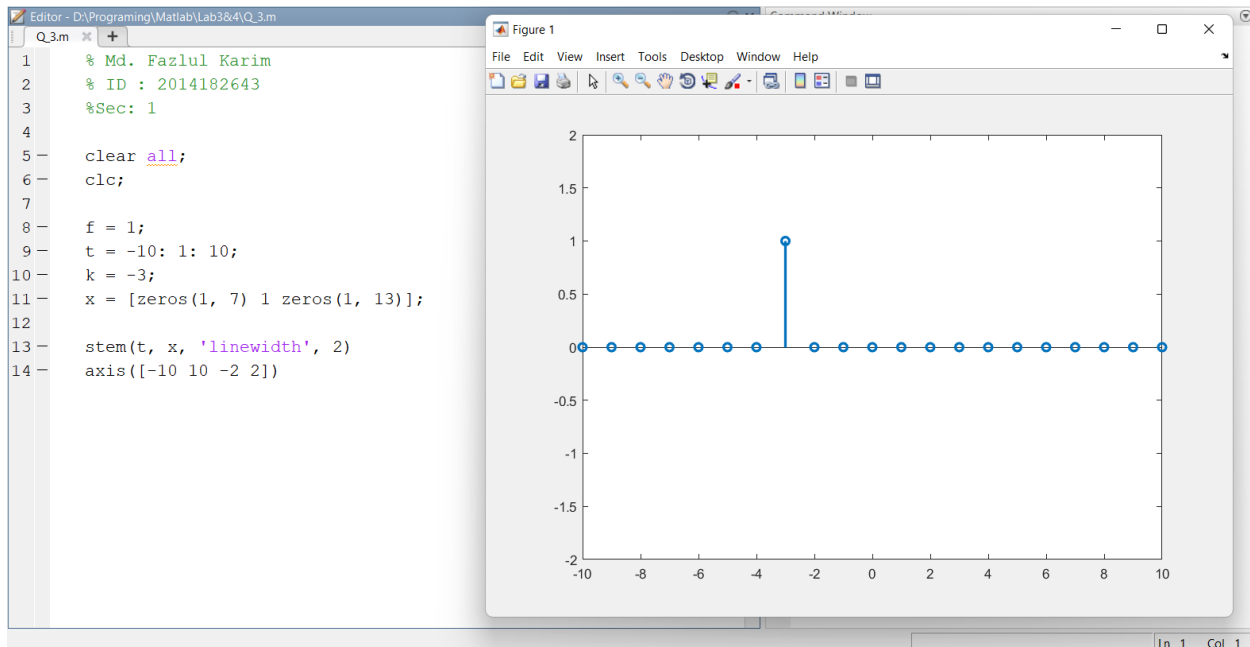
## Answer No – 2



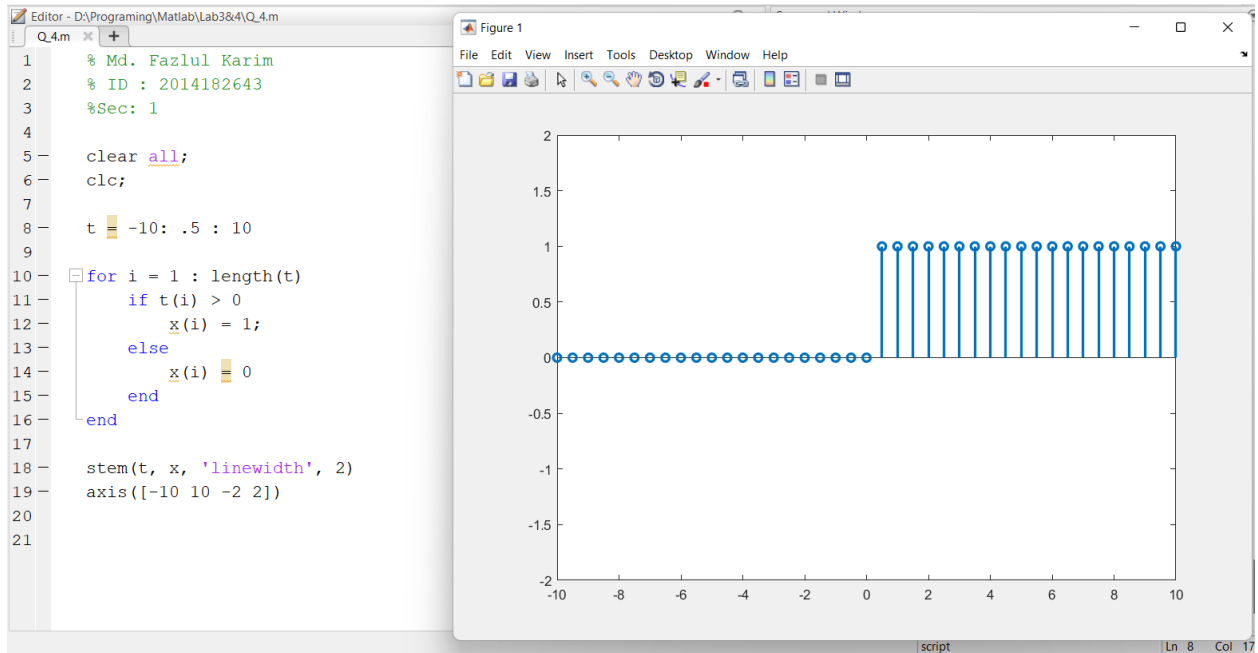
```
Editor - D:\Programing\Matlab\Lab3&4\Q_2.m
Q_2.m
23 -     heaviside(t2-2);
24 -     y = - 2* heaviside(t2);
25 -     f2 = x+y + heaviside(t2-2)
26
27
28     % Part 3
29     t3 = 0:.005:5
30     f3 = exp(t3) .* sin(2*pi*f*t3);
31
32
33     % Part 4
34     t4 = [0:.1: 3]
35     f4 = sin(2*pi*t4)
36
37
38     % Plot
39     figure(1)
40     subplot(4, 1, 1)
41     plot(t1, f1, 'linewidth', 2)
42     axis([0 3 -2 2])
43     hold on
44
45     subplot(4, 1, 2)
46     plot(t2, f2, 'linewidth', 2)
47     axis([-4 4 -1.5 1.5])
```

```
45 - subplot(4, 1, 2)
46 - plot(t2, f2, 'linewidth', 2)
47 - axis([-4 4 -1.5 1.5])
48 - grid on
49
50
51 - subplot(4, 1, 3)
52 - plot(t3, f3, 'linewidth', 2)
53 - axis([0 5 -150 150])
54 - legend('exp(t3) .* sin(2*pi*f*t3)')
55
56
57 - subplot(4, 1, 4)
58 - stem(t4, f4, 'linewidth', 2)
59 - axis([0 3 -1 1])
60 - legend('sin(2*pi*t4)')
61
62
63
64
65
```

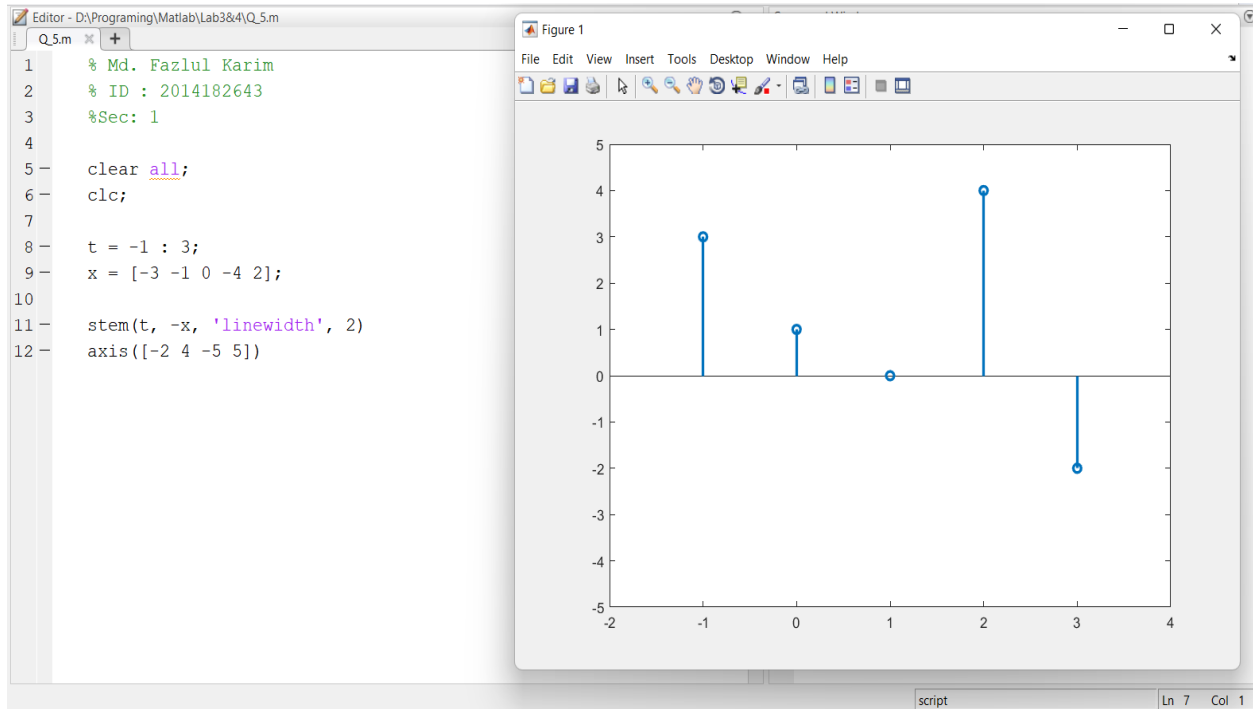
## Answer No – 3



## Answer No – 4

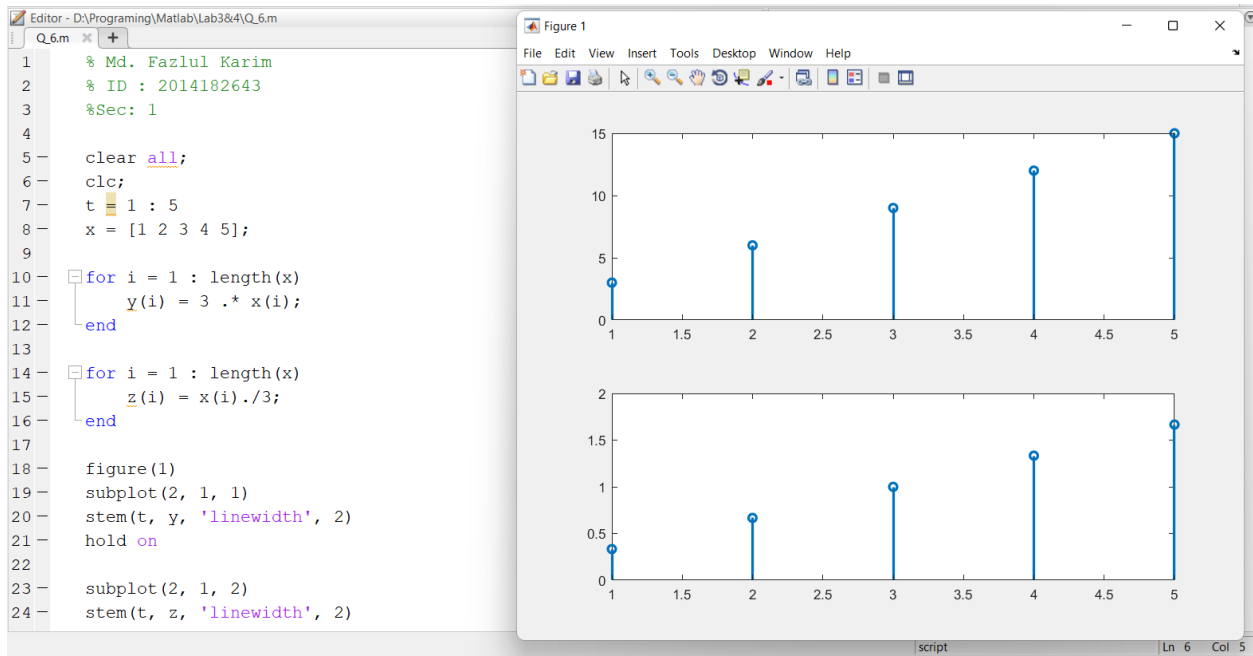


## Answer No – 5

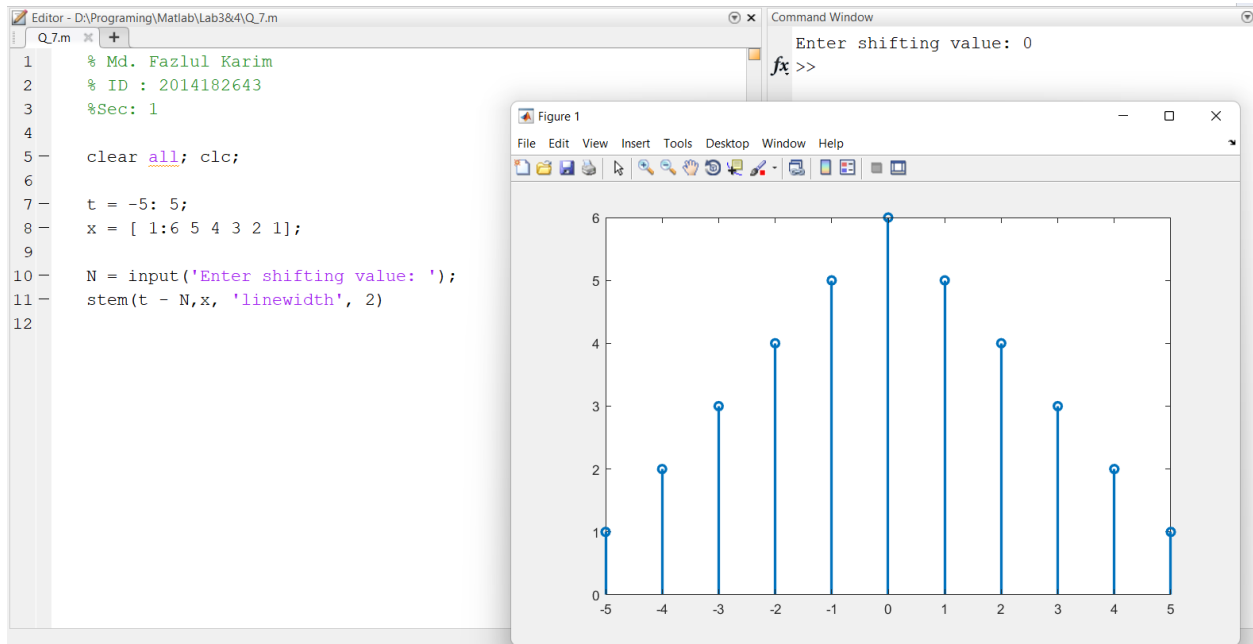




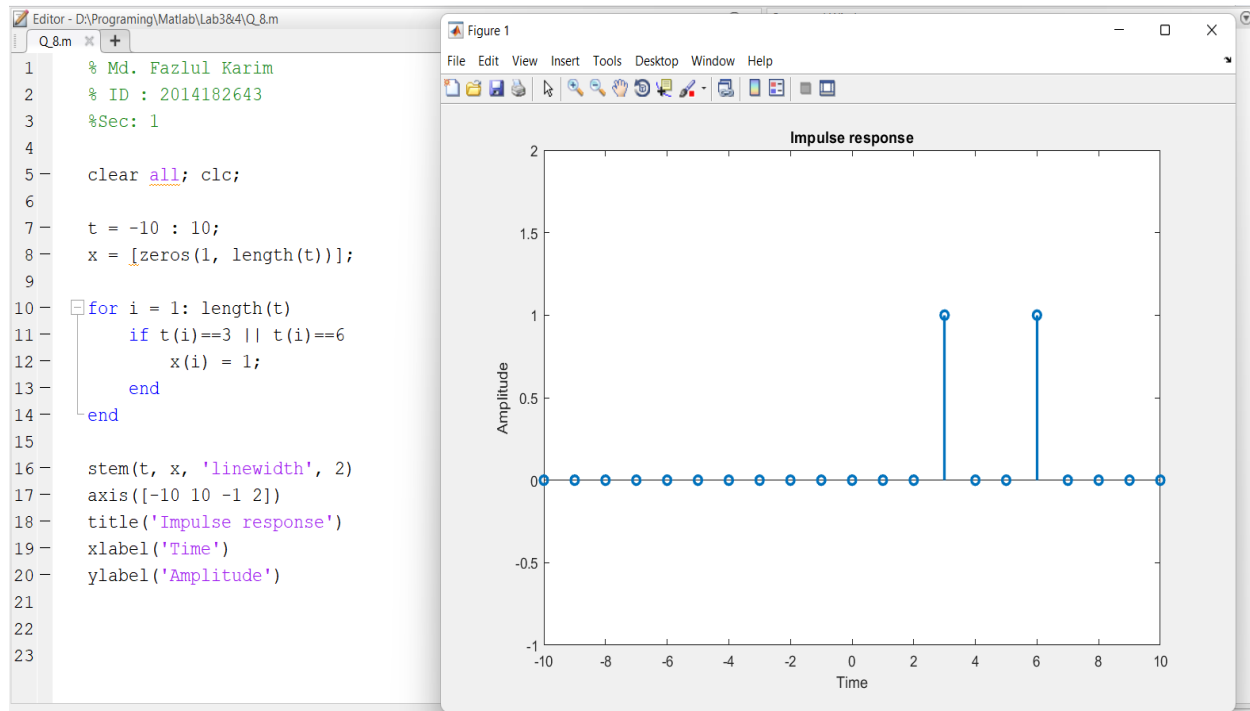
## Answer No – 6



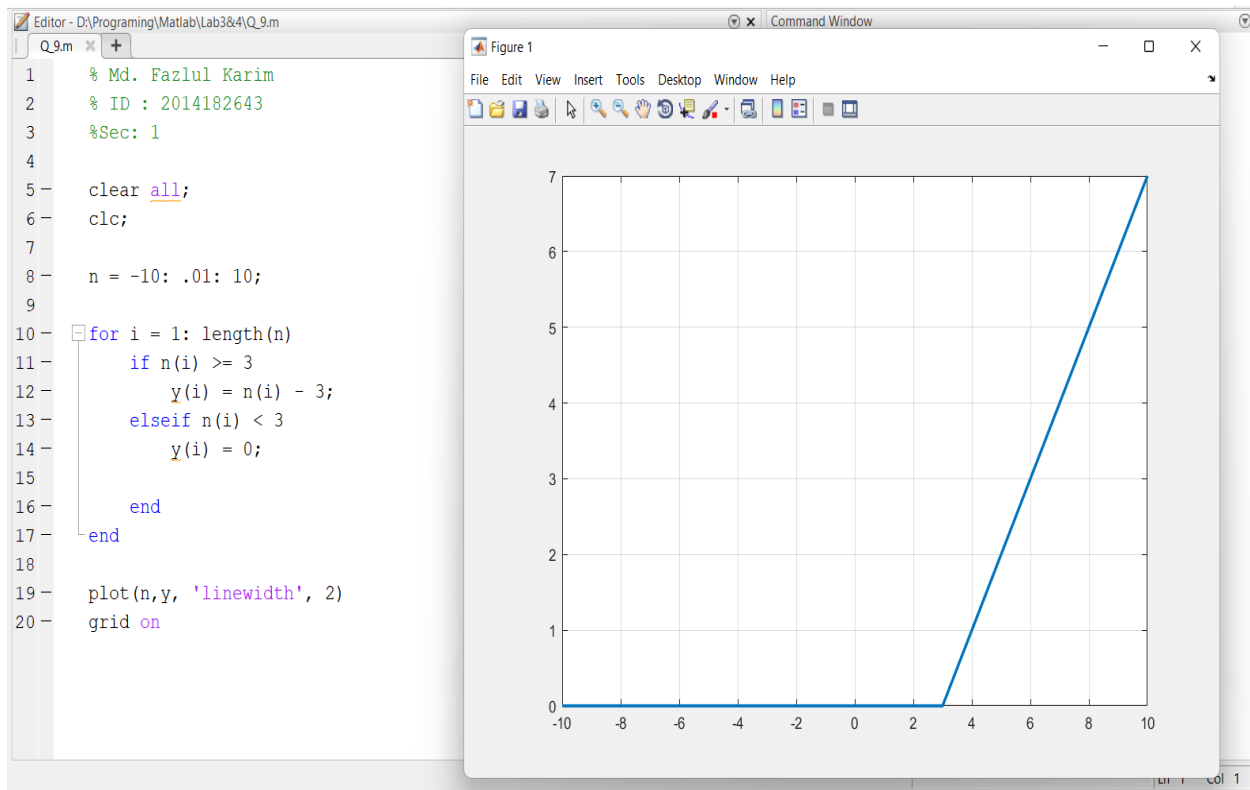
## Answer No – 7



## Answer No – 8



## Answer No – 9



## Answer No – 10

