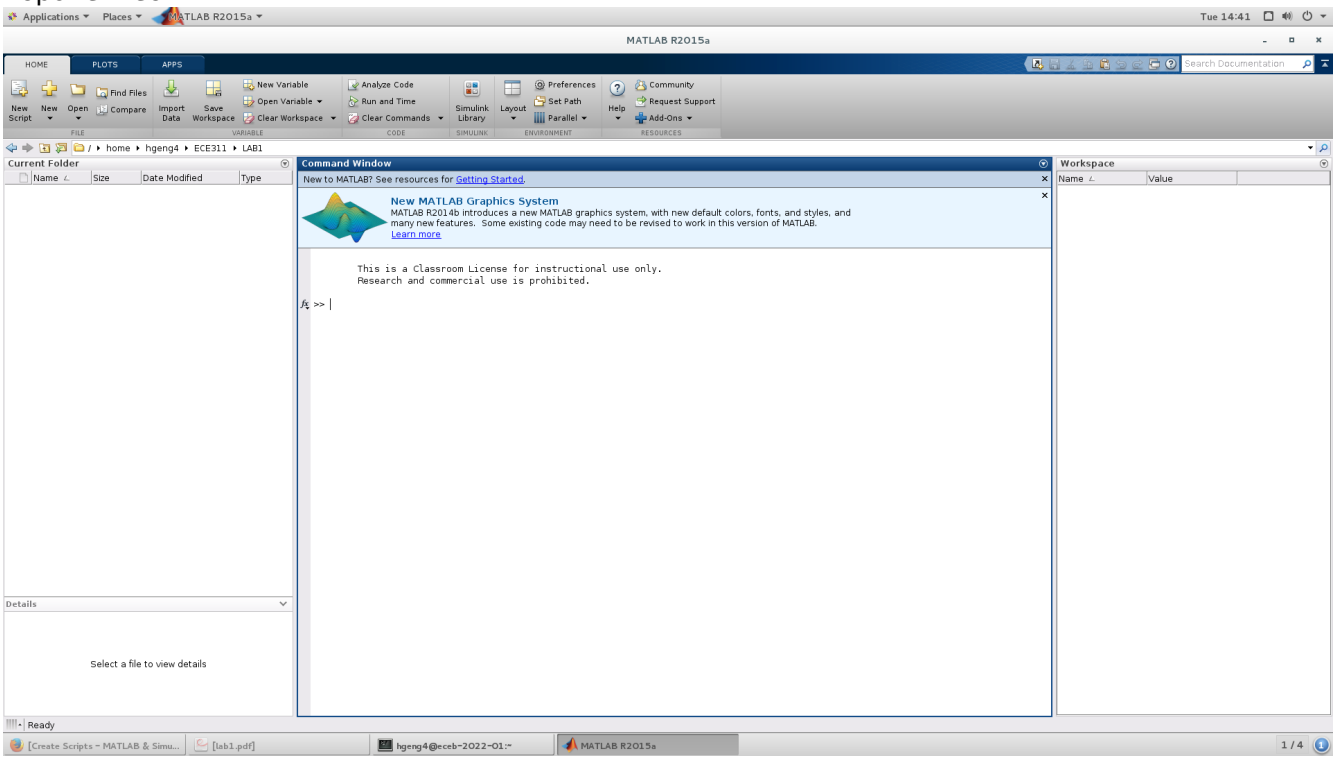
Hanfei Geng
hgeng4
August 27th, 2016

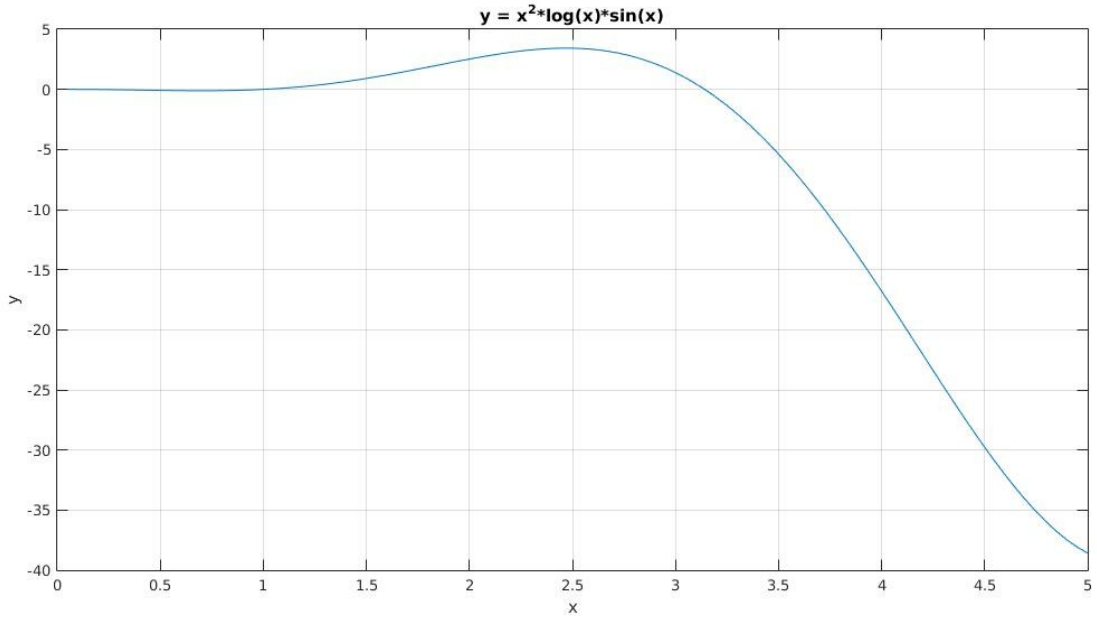
Report Item 1:



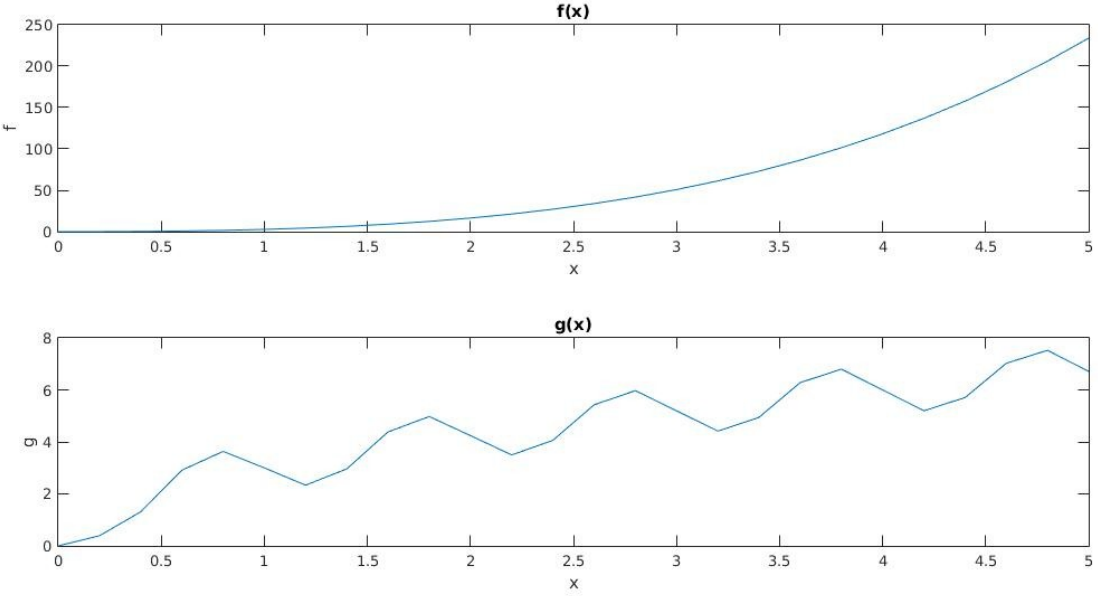
Report Item 2:

Since there are 12 points in the vector, there are 11 gaps between adjacent elements;thus the delta between them should be 1/11, as the the vector starts from 0 to 1. In general, the delta of a equal-spaced vector with size N that starts from a to b should be (b-a)/(N-1)

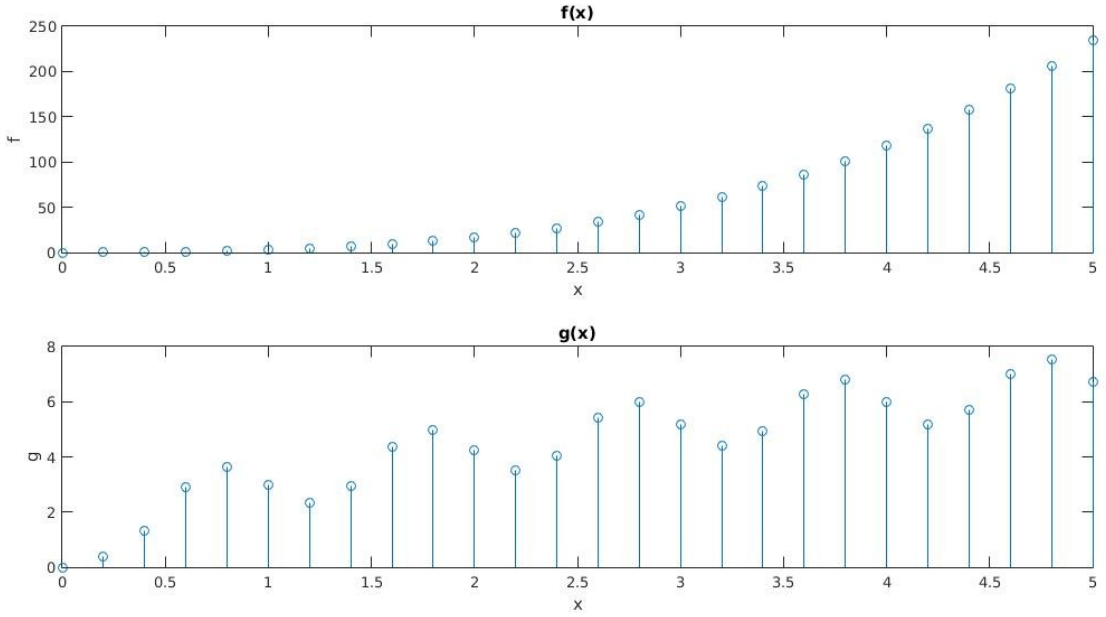
Report Item 3:



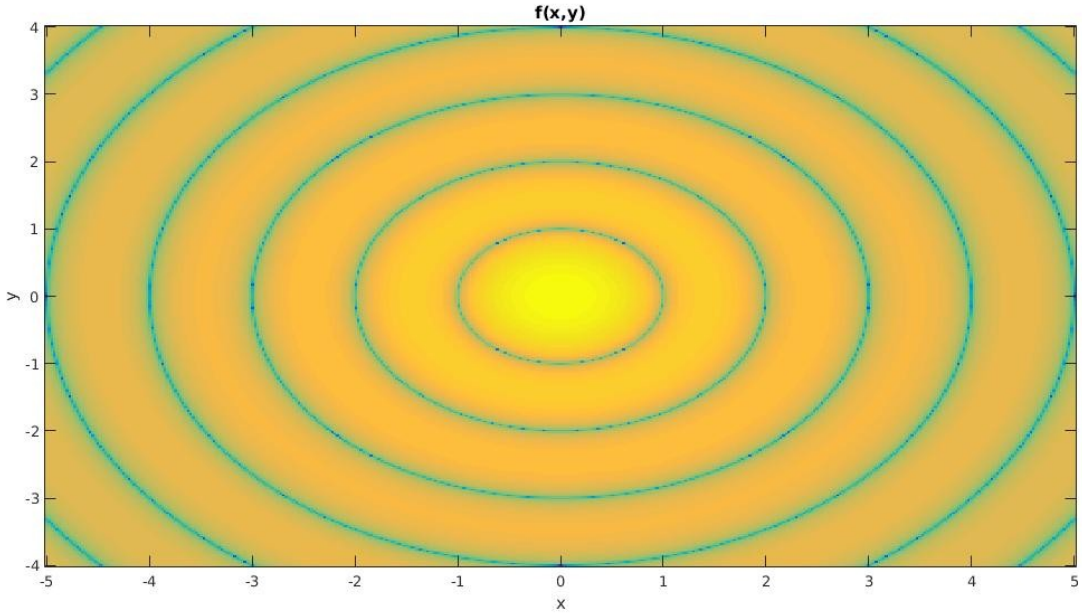
Report Item 4:
Part 1: plot of f(x) and g(x)



Part 2: stem of f(x) and g(x)

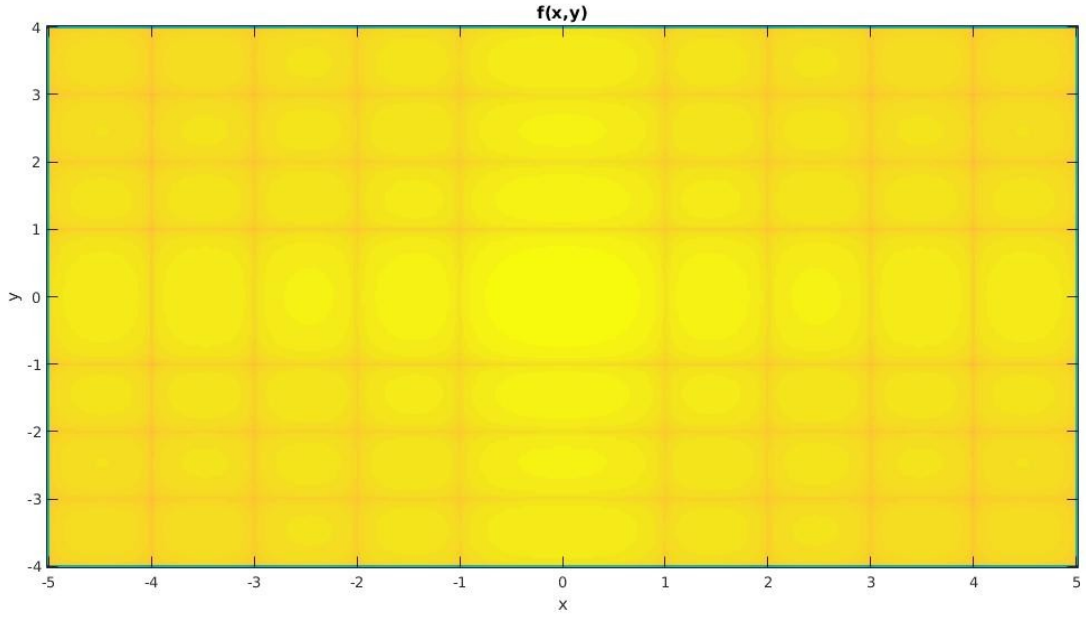


Report Item 5:
Part 1:



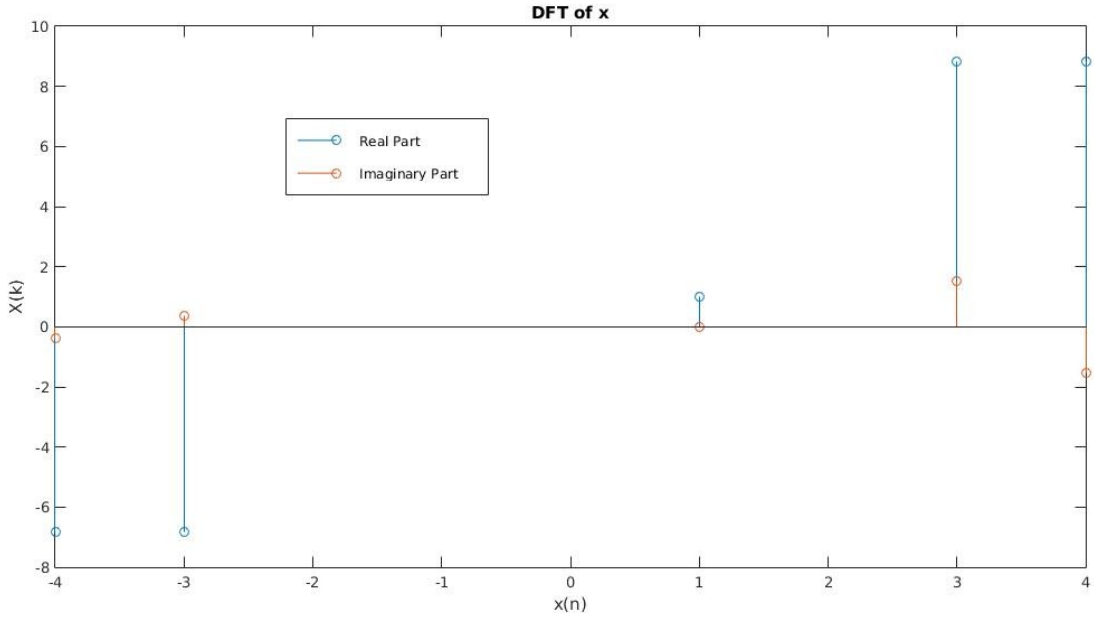
f (x, y) = sinc ((x 2 + y 2))^0.5

Part 2:



f (x, y) = sinc (x) sinc (y) .

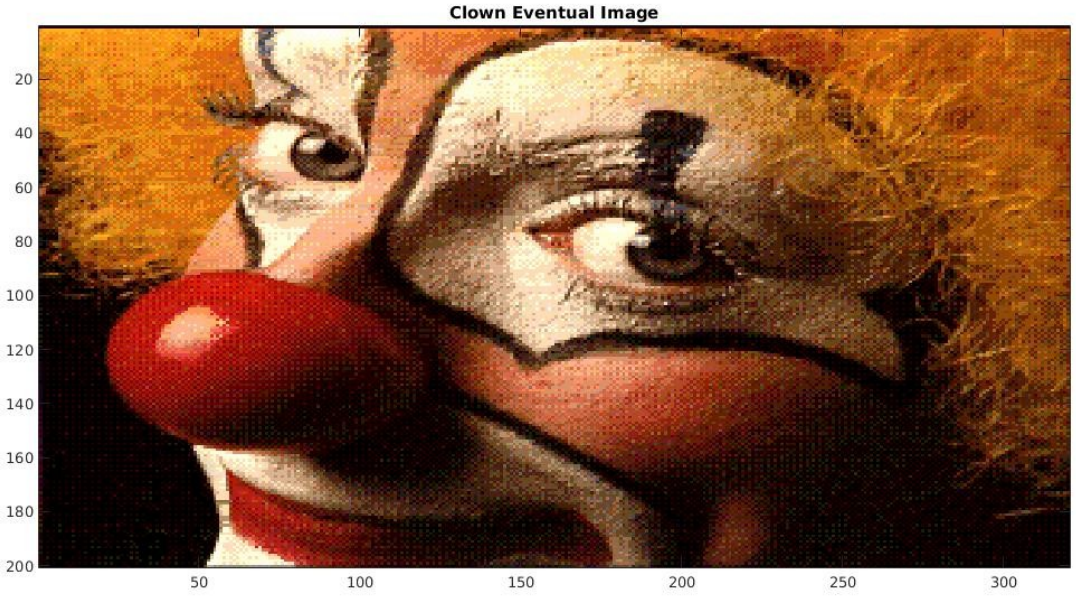
Report Item 6:



Report Item 7:
The chosen frequency is 44.1kHz. The range of human hearing is from 20Hz to20kHz

Report Item 8:

Part 1:


Clown Eventual Image
20
40
60
80
100
120
140
160
180
200
50
100
150
200
250
300

Part 2:

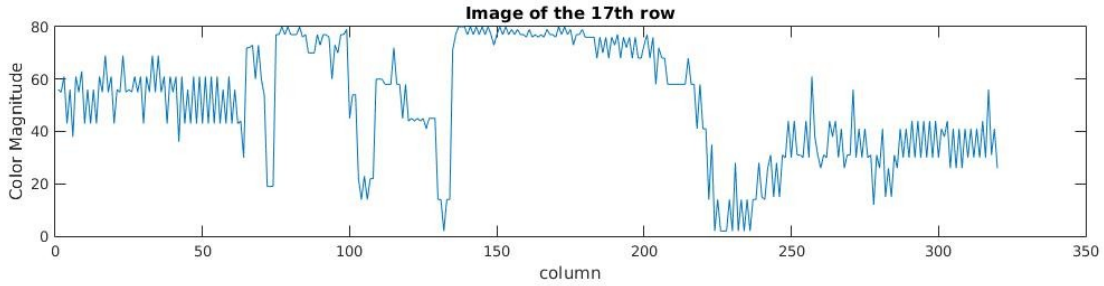


Image of the 17th row
Color Magnitude
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80
0
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100
150
200
250
300
350
column

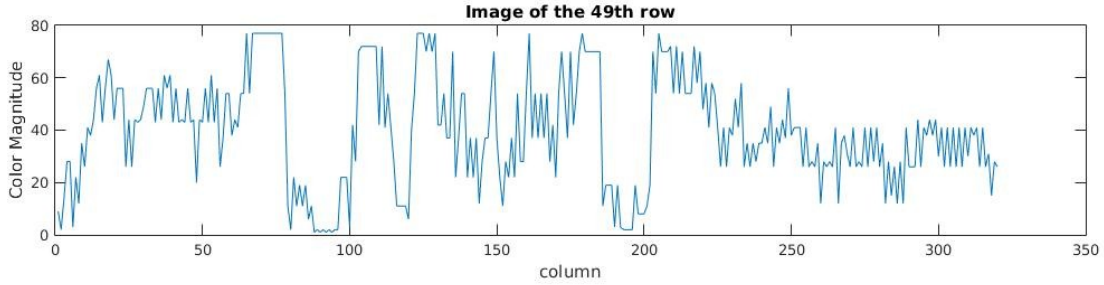
Image of the 49th row
Color Magnitude
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0
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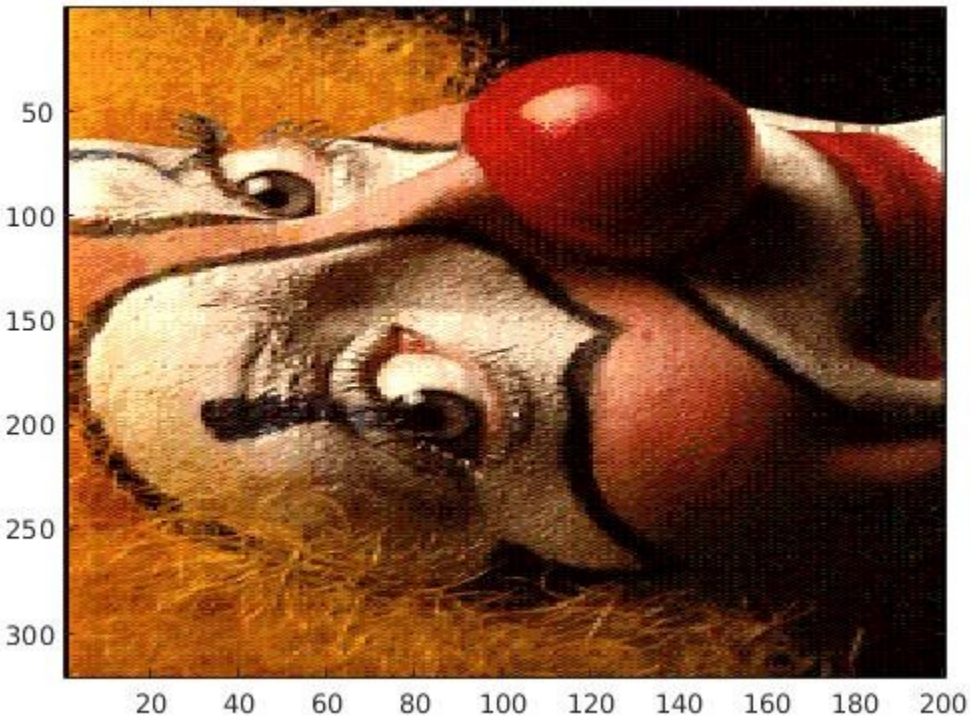
100
150
200
250
300
350
column

Part 3:


50
100
150
200
250
300
20
40
60
80
100
120
140
160
180
200