

ID2090-Final Assignment

E Prakathishwar

ME19B103

Q1) Flower 1 :

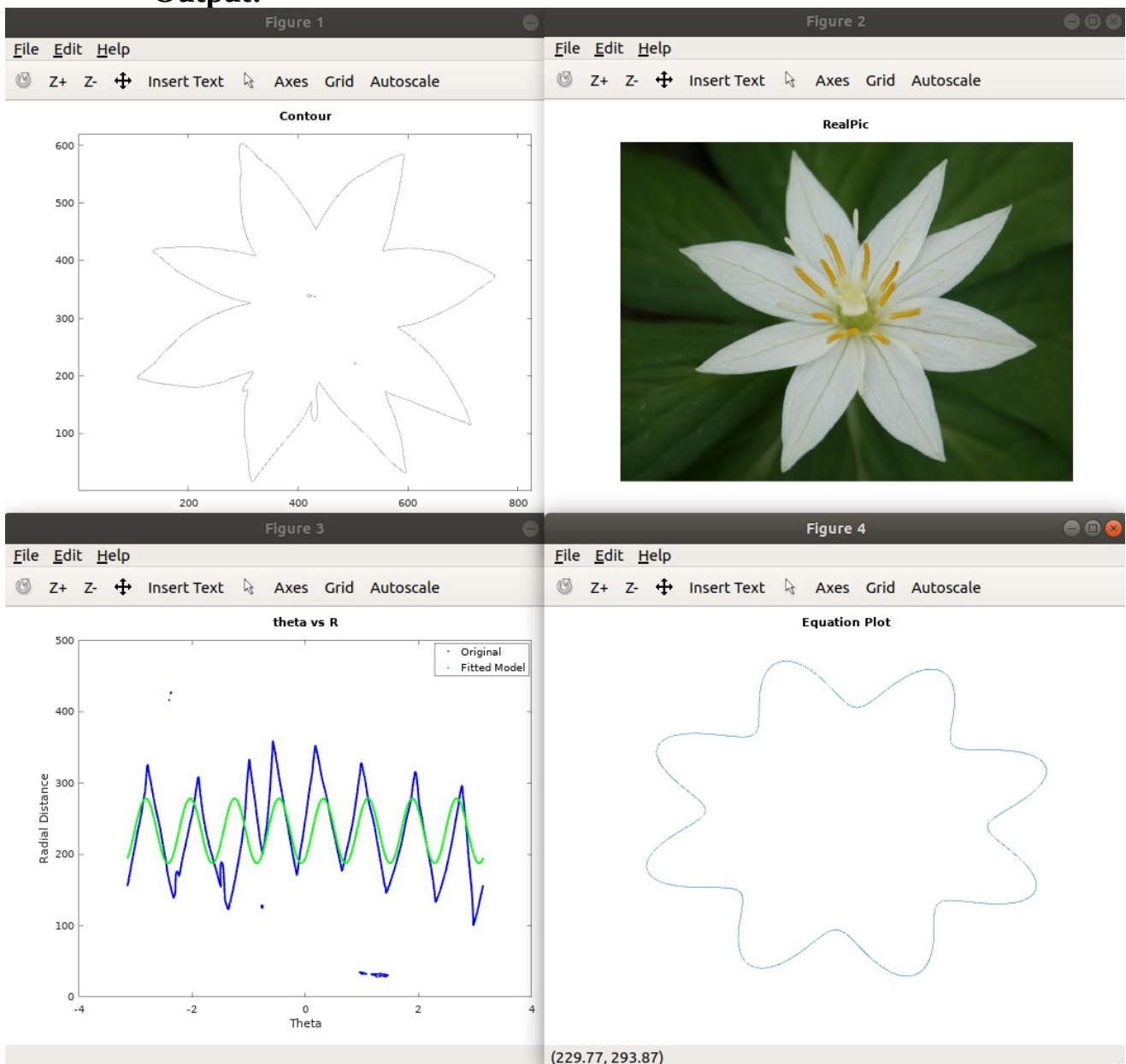
Flower.png – Size 482.6 kB (4,82,563, bytes)

Flower1equation.txt – Size 110 bytes

Compression ratio achieved = 0.022795 %

No of Petals/ symmetry = No of peaks in Figure 3 (Theta vs R graph)

Output:



Flower 2 :

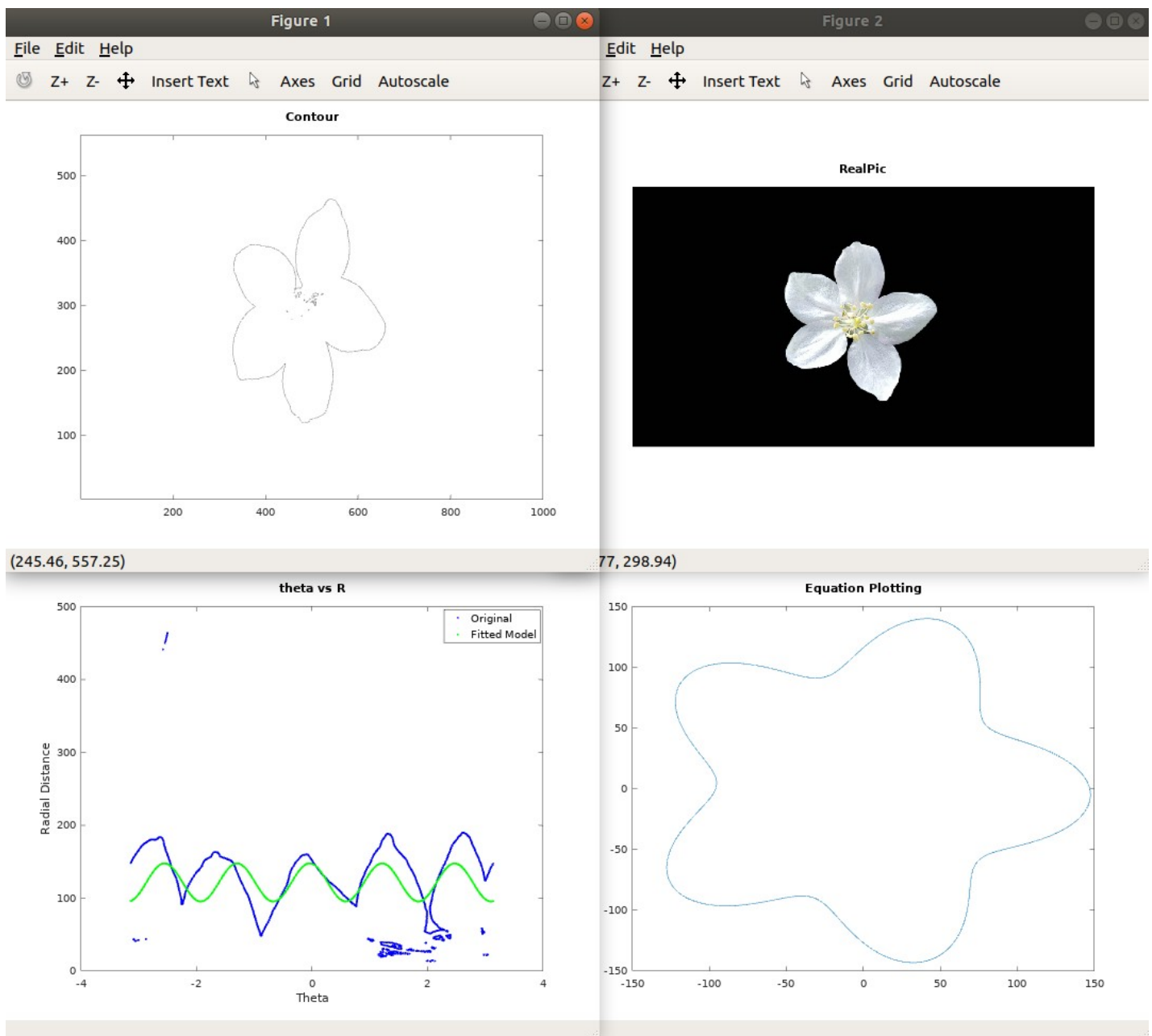
flower2.webp – Size 22.1 kB (22,106 bytes)

Flower1equation.txt – Size 112 bytes

Compression ratio achieved = 0.5066 %

No of Petals/ symmetry = No of peaks in Figure 3 (Theta vs R graph)

Output:



Q2) Function $g = A(1) + A(2)*\exp(-A(3).*x)$

Error 5% :

del A(1) = - 1.08412

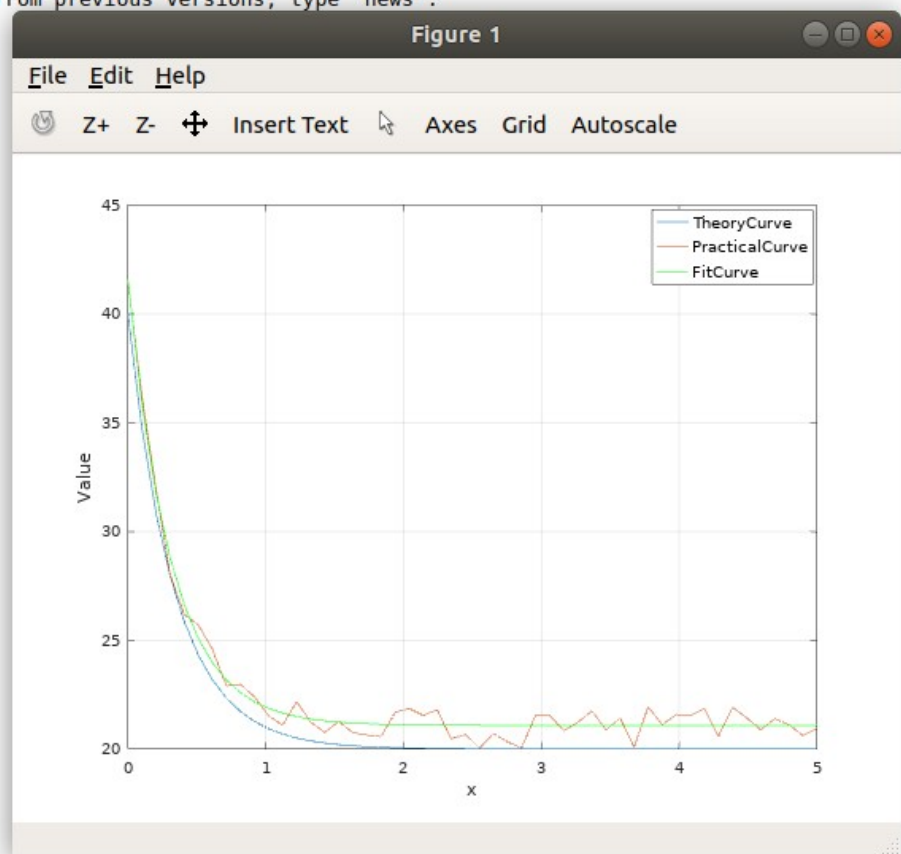
del A(2) = - 0.51325

del A(3) = 6.19729

Read <http://www.octave.org/bugs.html> to learn how to submit bug reports.
For information about changes from previous versions, type 'news'.

```
>> run Q2.m
Error = 0.050000
CoeffError =

-1.08412 -0.51325 6.19729
>> |
```



Error 7% :

del A(1) = - 1.1360

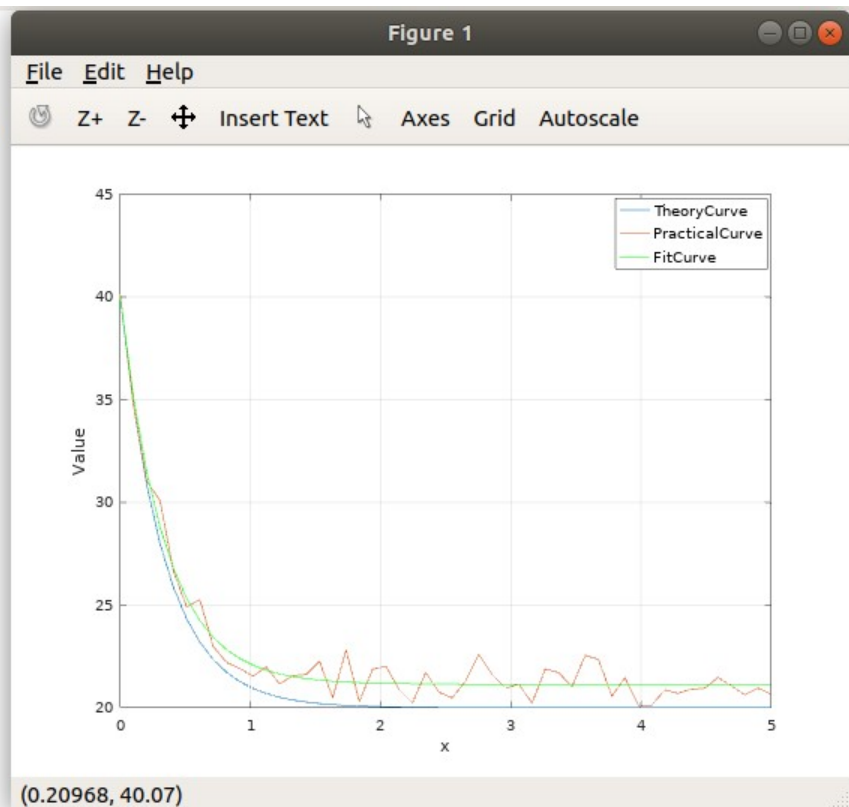
del A(2) = 1.1133

del A(3) = 5.9515

```
>> run Q2.m
Error = 0.070000
CoeffError =

-1.1360  1.1133  5.9515

>> |
```



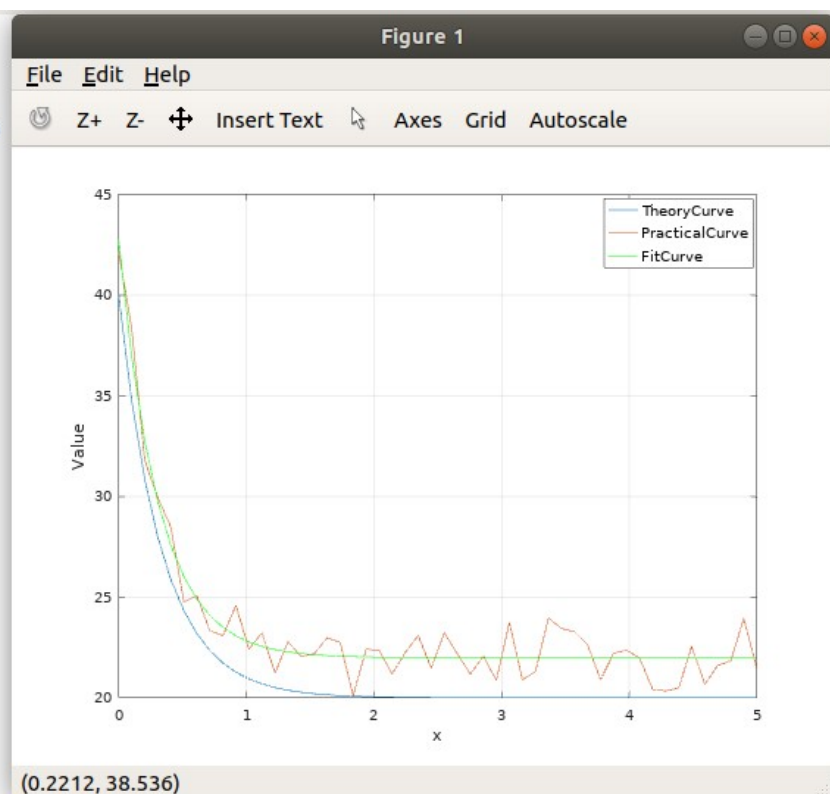
Error 10% :

del A(1) = - 1.98623
del A(2) = - 0.73044
del A(3) = 6.20935

```
>> run Q2.m
Error = 0.10000
CoeffError =

-1.98623 -0.73044  6.20935

>> |
```



Observation:

Del of A(1) increases with Error

Del of A(2) follows no trend with Error

Del of A(3) follows no trend with Error