

Siddharth Dev Tiwari
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COMP2119 2B

Programming Assignment

ENVIRONMENT-

Programming Language used is Python3 version 3.6.2

```
siddharth — -bash — 80x24
Last login: Mon Mar  4 01:13:09 on ttys000
[Siddharths-MacBook-Air:~ siddharth$ python3 --version
Python 3.6.2
Siddharths-MacBook-Air:~ siddharth$
```

System- macOS Mojave Version 10.14

Libraries used:

math
numpy
matplotlib.pyplot
time

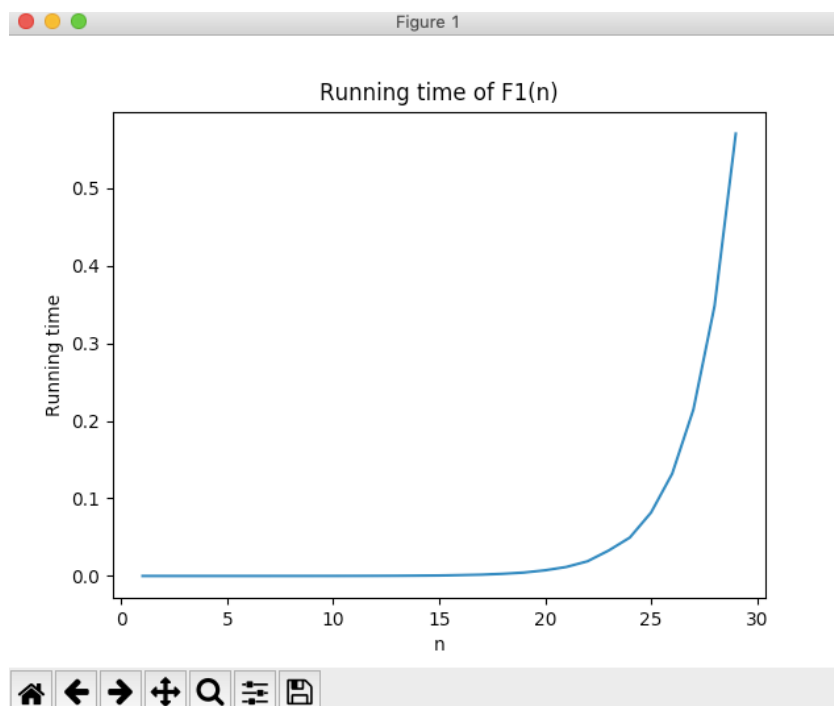
Files uploaded along with this:

F1(n).py F2(n).py F3(n).py

Input1.txt Input2.txt Input3.txt

Answer 1)

Exponential Running time



Answer 2)

Red line shows the graph for the linear time algorithm, $F2(n)$ $O(n)$

Black line shows the graph for $O(\log n)$, $F3(n)$

