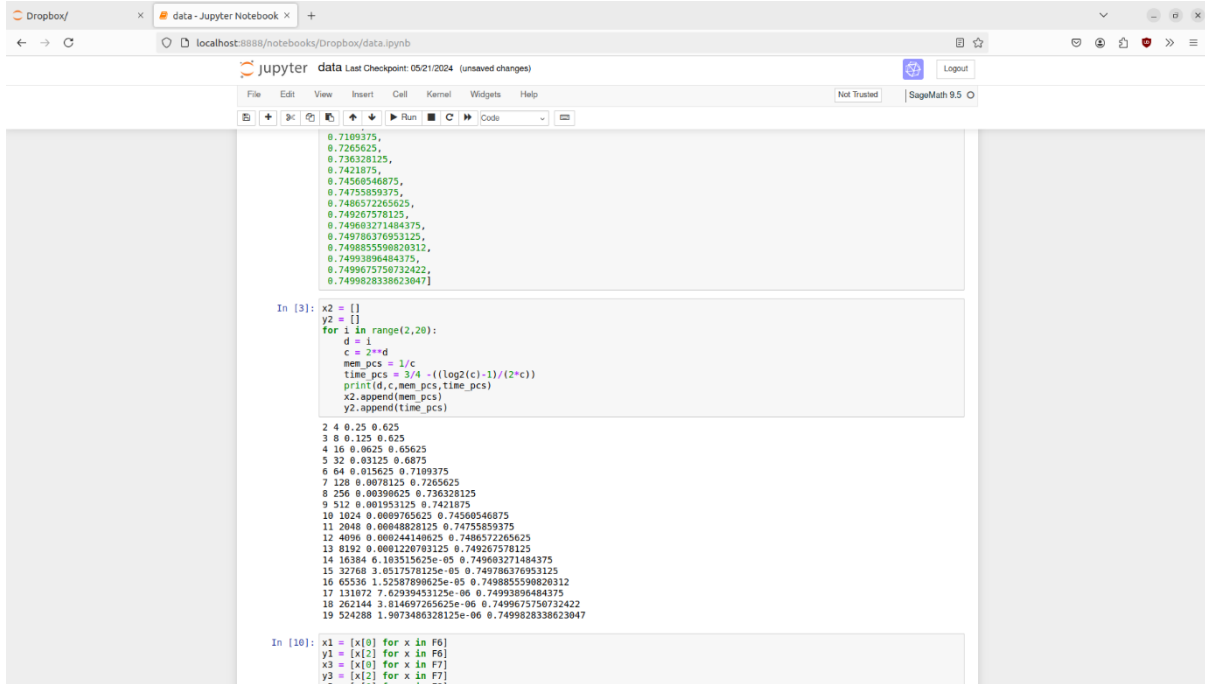


# Achhruram Memorial College, Jhalda

## 2.3.1 Student Centric Methods

### Various Softwares Used for Academic purposes



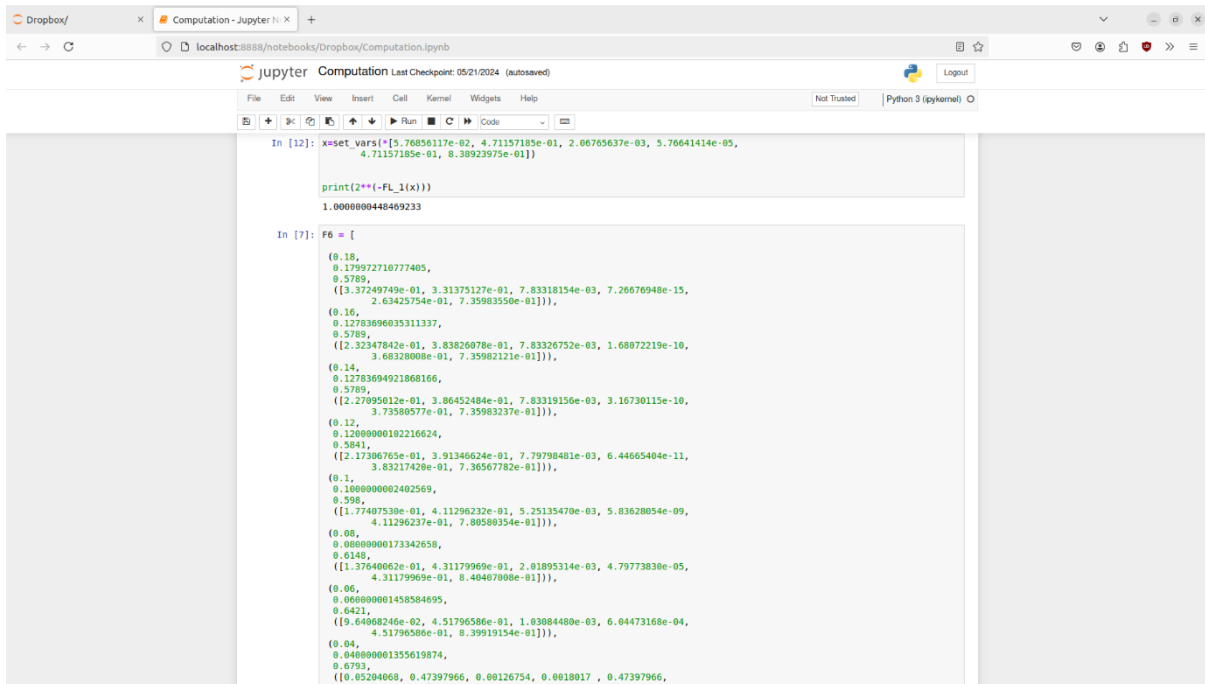
The screenshot shows a Jupyter Notebook interface with the following code and output:

```
In [3]: x2 = []
        y2 = []
        for i in range(2,20):
            d = 1
            c = 2**d
            mem_pcs = 1/c
            time_pcs = 3/4 - ((log2(c)-1)/(2*c))
            print(d,c,mem_pcs,time_pcs)
            x2.append(mem_pcs)
            y2.append(time_pcs)

2 4 0.25 0.625
3 8 0.125 0.625
4 16 0.0625 0.65625
5 32 0.03125 0.6875
6 64 0.015625 0.7189375
7 128 0.0078125 0.725625
8 256 0.00390625 0.736328125
9 512 0.001953125 0.7421875
10 1024 0.0009765625 0.7456946875
11 2048 0.00048828125 0.74755859375
12 4096 0.000244140625 0.7486572265625
13 8192 0.0001220703125 0.749267578125
14 16384 0.183515625e-05 0.749683271484375
15 32768 3.6517578125e-05 0.749786376953125
16 65536 1.52587890625e-05 0.749885598820312
17 131072 7.62939453125e-06 0.74993896484375
18 262144 3.814697265625e-06 0.7499675750732422
19 524288 1.9073486328125e-06 0.7499828338623047
```

```
In [10]: x1 = [x[0] for x in F6]
         y1 = [x[2] for x in F6]
         x3 = [x[0] for x in F7]
         y3 = [x[2] for x in F7]
```

### SageMath



The screenshot shows a Jupyter Notebook interface with the following code and output:

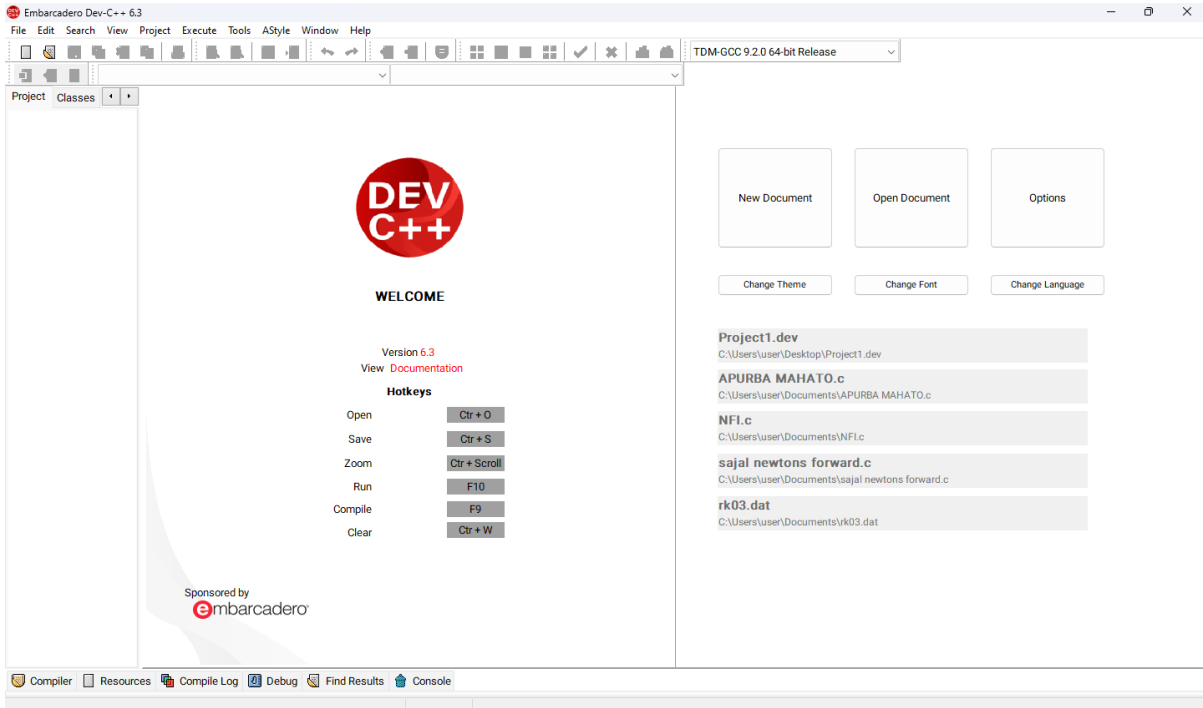
```
In [12]: xset_vars([5.76856117e-02, 4.71157185e-01, 2.06785637e-03, 5.76641414e-05,
                4.71157185e-01, 8.38923975e-01])

print(2**(-FL_1(x)))

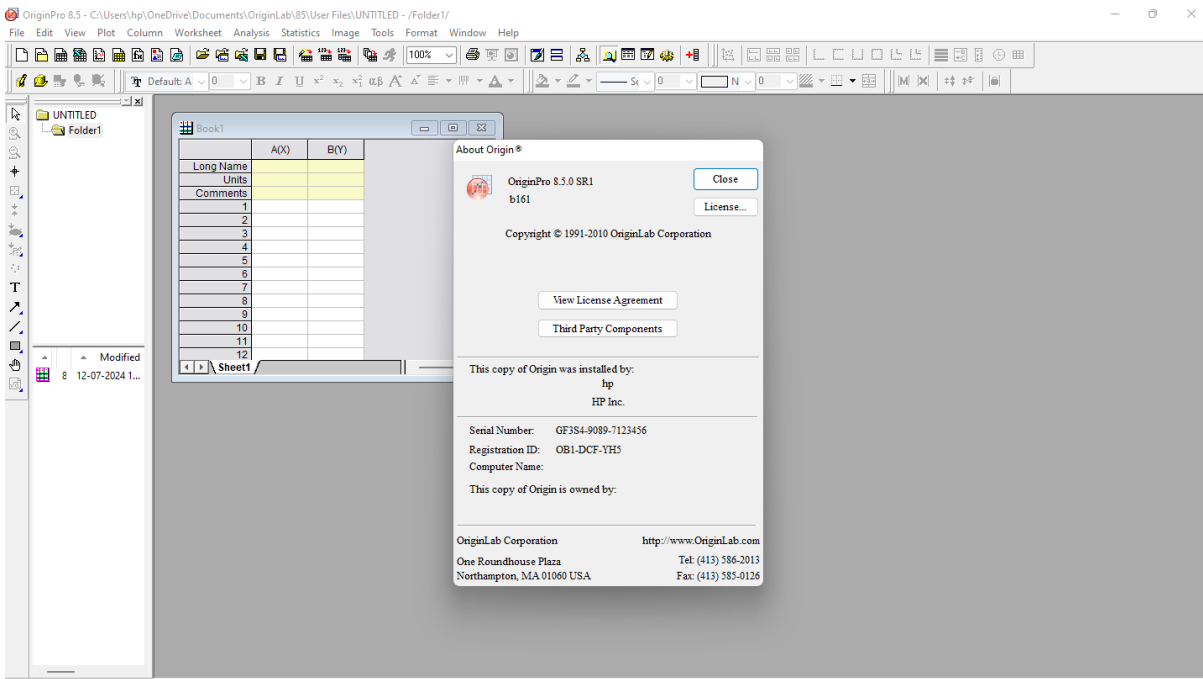
1.0000000448469233
```

```
In [7]: F6 = [
(0.18,
0.179972718777405,
0.5789,
([3.37249749e-01, 3.31375127e-01, 7.83318154e-03, 7.26676948e-15,
2.63425754e-01, 7.35983556e-01])),
(0.16,
0.12783696035311337,
0.5789,
([2.32347842e-01, 3.89820078e-01, 7.83326752e-03, 1.68072219e-10,
3.68328008e-01, 7.35982121e-01])),
(0.14,
0.12783694921866166,
0.5789,
([2.27095012e-01, 3.86452484e-01, 7.83319156e-03, 3.16730115e-10,
3.73580577e-01, 7.35983237e-01])),
(0.12,
0.12809000182216624,
0.5841,
([2.17386765e-01, 3.91346624e-01, 7.9798481e-03, 6.44665404e-11,
3.83217420e-01, 7.36567782e-01])),
(0.1,
0.1060900002402569,
0.595,
([1.77407530e-01, 4.11296232e-01, 5.25135470e-03, 5.83628054e-09,
4.11296237e-01, 7.80580354e-01])),
(0.08,
0.08000000173342658,
0.6148,
([1.37640662e-01, 4.31179969e-01, 2.01895314e-03, 4.79773830e-05,
4.31179969e-01, 8.40407808e-01])),
(0.06,
0.060000001458584695,
0.6421,
([9.64968246e-02, 4.51796586e-01, 1.83084480e-03, 6.04473168e-04,
4.51796586e-01, 8.39919154e-01])),
(0.04,
0.040000001355619874,
0.6793,
([8.65284668, 0.47397866, 0.00126754, 0.0018017, 0.47397866,
8.70648897111])
```

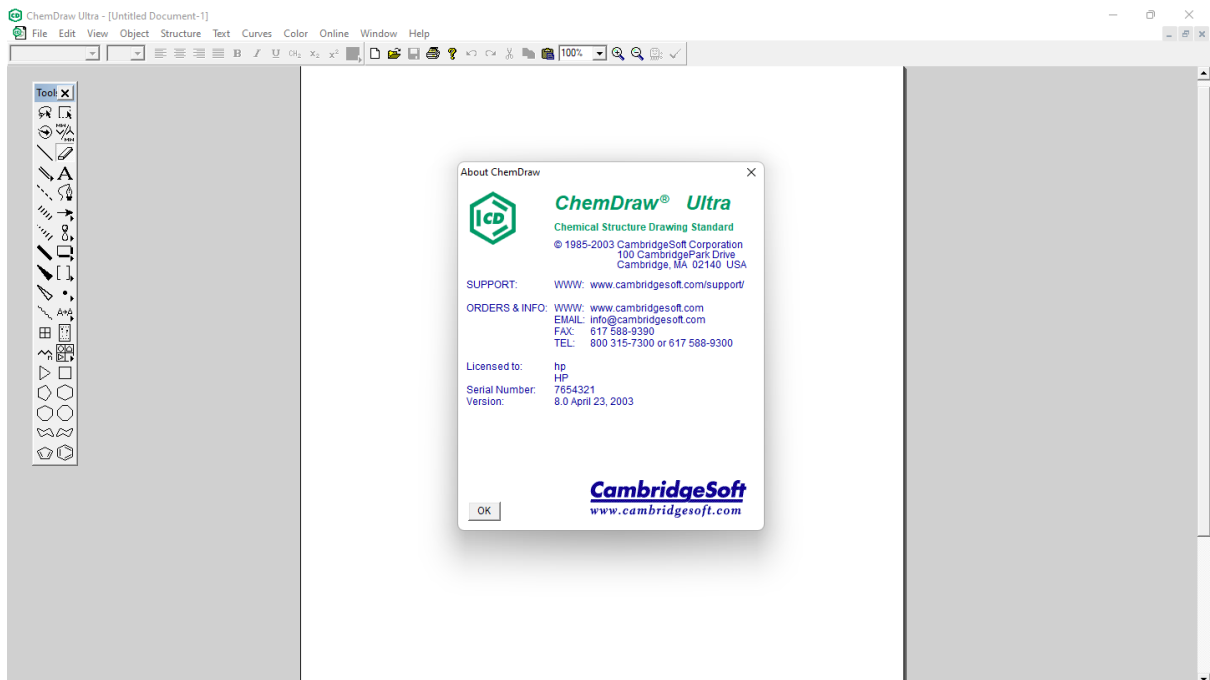
# Python



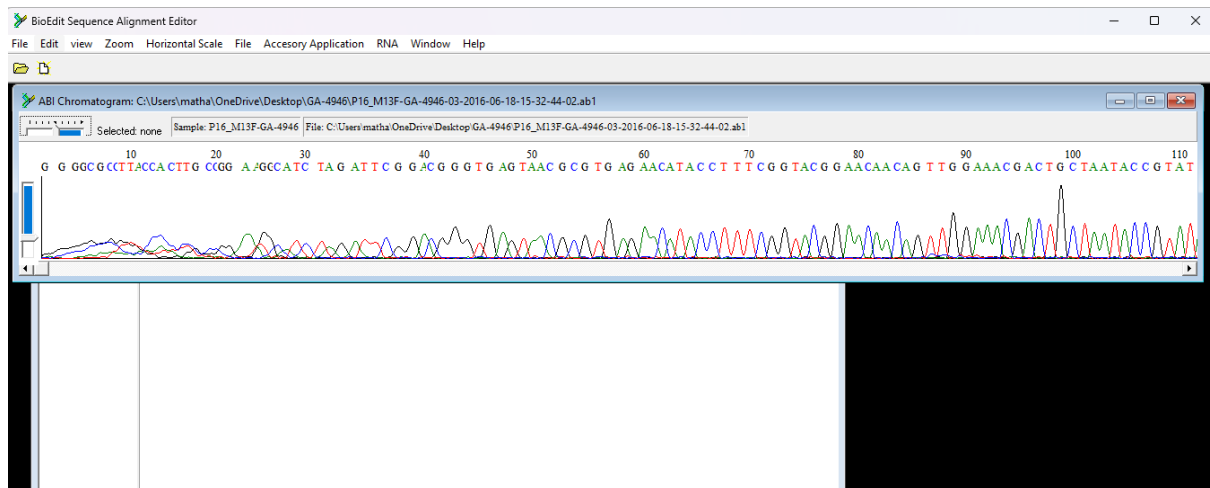
# C Language



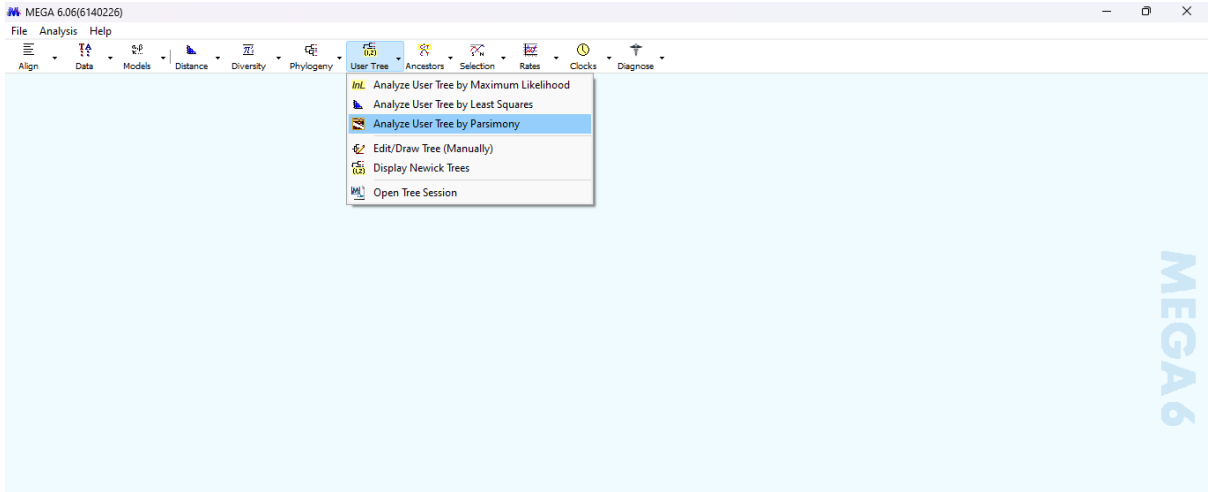
# OriginPro



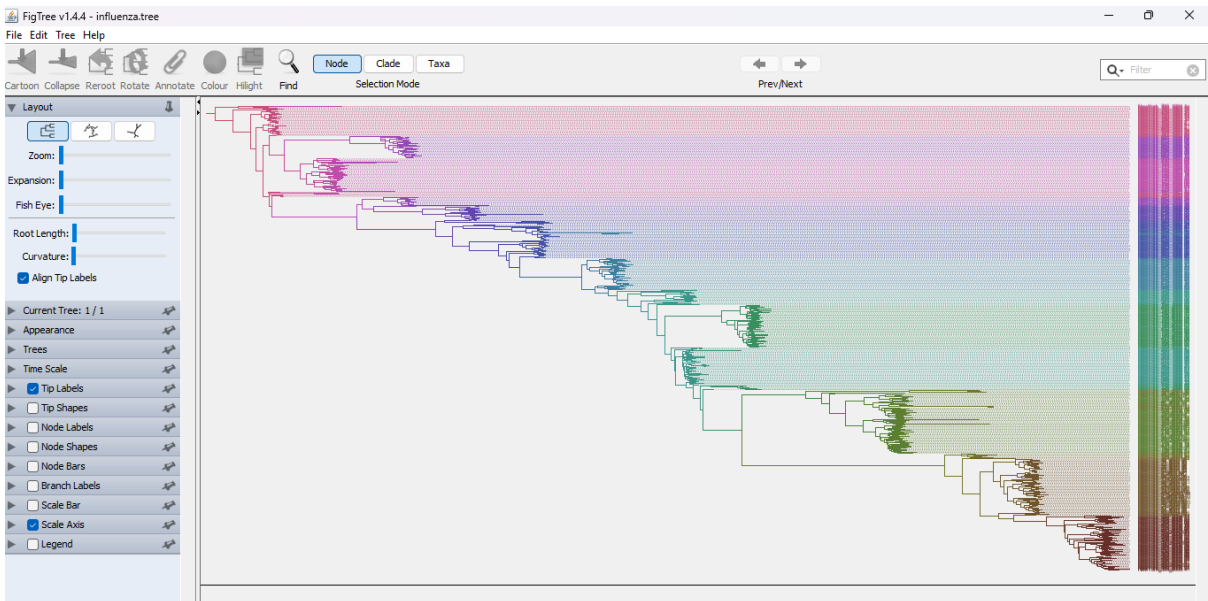
ChemDraw



BioEdit



MEGA



TreeGraph