Python Tutorial

```
import numpy as np
import matplotlib.pyplot as plt
from astropy.io import fits
#Basic Operations
print('Hello World')
a,b = 22,98
print('Product of a and b is ',a*b)
→ Hello World
     Product of a and b is 2156
#Plotting
a = np.linspace(-100,100,1000) #An array
b = 6*a**3 + 5
plt.plot(a,b,'-k') #-k is equivalent of "linestyle='-', color='black' "
plt.show() #Fun fact, k comes from "key" or printer's black
\overline{2}
           1e6
        6
        4
        2
        0
      -2
      -4
      -6
```

#Fibonacci Numbers

```
a, b = 0, 1
print("Fibonacci Sequence:")
for i in range(20):
```

-100

-75

-50

-25

0

25

50

75

100

```
pr:muc(a, enu= )
a, b = b, a + b
```

Fibonacci Sequence:
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181