# Session7

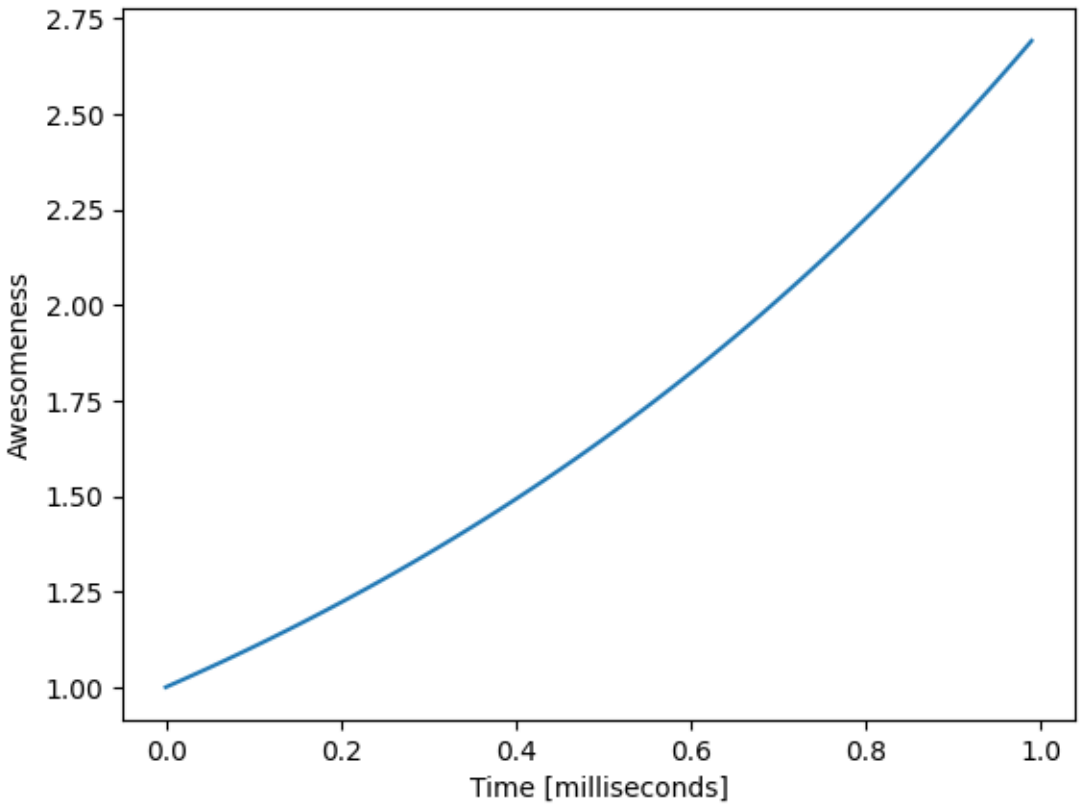
February 5, 2024

1. Create a Jupyter notebook, import matplotlib.
2. Write cells that 1) create an array x ranging from [0,1] in 100 steps and 2) that defines a function that returns exp(x).
3. In a new cell use the function to set y=exp(x), and then plot x vs. y. Label the x-axis as "Time [milliseconds]" and the y-axis as "Awesomeness".
4. Save the figure as a PDF.

[31]:
```
import matplotlib.pyplot as plt
import numpy as np

%matplotlib inline
```

[32]:
```
x = np.arange(0, 1, 1/100)

def exp(x):
    return np.exp(x)
```

[38]:
```
y = exp(x)

plt.plot(x, y)
plt.xlabel("Time [milliseconds]")
plt.ylabel("Awesomeness")

plt.savefig('fig.pdf', bbox_inches='tight', dpi=800)

plt.show()
```


2.75
2.50
2.25
2.00
1.75
1.50
1.25
1.00
Awesomeness
0.0
0.2
0.4
0.6
0.8
1.0
Time [milliseconds]