

example

September 13, 2022

Let's check out the platform we're currently running on

```
[ ]: import platform
print(platform.uname())
```

```
uname_result(system='Linux', node='01a8cbf55cbe', release='5.10.104-linuxkit',
version='#1 SMP Thu Mar 17 17:08:06 UTC 2022', machine='armv7l')
```

```
[ ]: import example as m
print(m.add(1, 2))
```

3

```
[ ]: # print(m.add_quad([0, 1, 2, 3], [-1, -2, 4, 7]))
```

```
[ ]: from plotly.subplots import make_subplots
import plotly.graph_objects as go
# import numpy as np

def plot(x, y):
    fig = make_subplots(rows=1, cols=1)
    fig.add_trace(go.Scatter(x=x, y=y), row=1, col=1)
    fig.update_yaxes(title_text='y', row=1, col=1)
    fig.update_xaxes(title_text='n', row=1, col=1)
    fig.show()
```

```
[ ]: # import numpy as np
osc = m.MagicCircle()
sample_rate = 1_000.0
osc.set_freq(sample_rate / 256, sample_rate)
# x = np.linspace(0, sample_rate, sample_rate)
x = [float(i) for i in range(0, int(sample_rate))]
y = [osc.advance() for i in x]
plot(x, y)
```

```
[ ]: from IPython.display import Audio
```

```
framerate = 44_100.
```

```
osc.reset()
osc.set_freq(440.0, framerate)
Audio([osc.advance() for i in range(0, 4 * int(framerate))], rate=framerate)
```

[]: <IPython.lib.display.Audio object>

```
[ ]: # from numpy.fft import fft, ifft

# Y = fft(y)
# N = len(Y)
# n = np.arange(N)
# T = N / sample_rate
# freq = n / T
# plot(freq, Y)
```