

## 1. Change the Time of a Signal without Varying the Frequency

README.md

# Time Shift of a Signal

### ## Description

This program demonstrates how to shift the timing of a signal without altering its frequency characteristics. This technique is useful in various digital signal processing applications where time alignment is necessary without affecting the signal's content.

### ## Installation

Requires:

- Python 3.x
- NumPy
- Matplotlib

Install dependencies with:

```
pip install numpy matplotlib
```

### ## Usage

To run this program, use the following command:

```
python time_shift.PY
```

This will output a plot showing the original signal and the time-shifted signal.

### ## Authors

- [Your Name]

### ## License

This project is open-sourced under the MIT license.

## 2. Change the Frequency of a Signal without Varying the Time

README.md

# Frequency Modification of a Signal

### ## Description

This program modifies the frequency of a signal without altering the time scale. It's particularly useful for signal analysis and synthesis in communications and audio processing.

### ## Installation

Requirements:

- Python 3.x
- NumPy
- Matplotlib

To install required

```
pip install numpy matplotlib
```

```
csharp
```

### ## Usage

Run the program with:

```
python frequency_change.py
```

A visual output comparing the original and frequency-altered signals will be displayed.

## Authors  
- [Your Name]

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