**Here is my time line learning:**

**Note**: every Lecture I should repeat its code in another notebook

**TU Python for Machine Learning Course**

**Lecture Notes 1:**

Hello world

## Operators, Types and Casting

## Booleans

## Lists

## Strings[¶](http://localhost:8888/notebooks/Desktop/Ahmed/Master/TUB/PyML/Lecture%2015%20Oktober%20-%2021%20Oktober/lecture1.ipynb#Strings)

## Precedence of operators

## Functions

## Dictionaries

## Classifiying Fruits: Conditional Expressions

## Iterators[¶](http://localhost:8888/notebooks/Desktop/Ahmed/Master/TUB/PyML/Lecture%2015%20Oktober%20-%2021%20Oktober/lecture1.ipynb#Iterators)

## Counting the number of objects "watermelon" in the data

## Reading Data from a File

## Classes

Ref:

**Lecture Notes 2:**

# **Numpy:**

## Basics

### Numpy arrays

### Operations between arrays

### Equivalent operations with lists

### Shapes of arrays

## Matrices

## Performance evaluation

## Ref:

# [Shortcut key for changing code cell to markdown cell in jupyter notebook](https://stackoverflow.com/questions/47787721/shortcut-key-for-changing-code-cell-to-markdown-cell-in-jupyter-notebook)

## <https://stackoverflow.com/questions/47787721/shortcut-key-for-changing-code-cell-to-markdown-cell-in-jupyter-notebook>

# [kidpixo](https://gist.github.com/kidpixo)/[jupyter\_shortcuts.md](https://gist.github.com/kidpixo/f4318f8c8143adee5b40)

## <https://gist.github.com/kidpixo/f4318f8c8143adee5b40>

# **Plotting**

## Basic plot

## Advanced Numpy

**Special Array Initializations**

**Array type**

**Casting**

**Reshaping and transposing**

**Broadcasting**

**Indexing**

## Boolean Arrays

# **Analyzing a Dataset**

**Reduce-type operations**

**Retain two interesting features (5 and 12)**

**Scatter-plot the first two dimensions**

**Normalize the data**

**Computing a distance matrix**

**alternative way of computing a distance matrix:**

**Highlighting nearby data points**

## Getting help