

Machine Learning In Python

Subject : Introduction of Python

Lecturer : Reza Akbari Movahed

Hamedan University of Technology

Autumn 2020

What is the Python?

Python History

- Python is an interpreted, high-level and general-purpose programming language.
- It was created by Guido van Rossum and first released in 1991
- Its language constructs and object-oriented approach aim to help programmers write clear, logical code for small and large-scale projects.
- It has been developed and improved since its first releasing.
- The last released Python version is 3

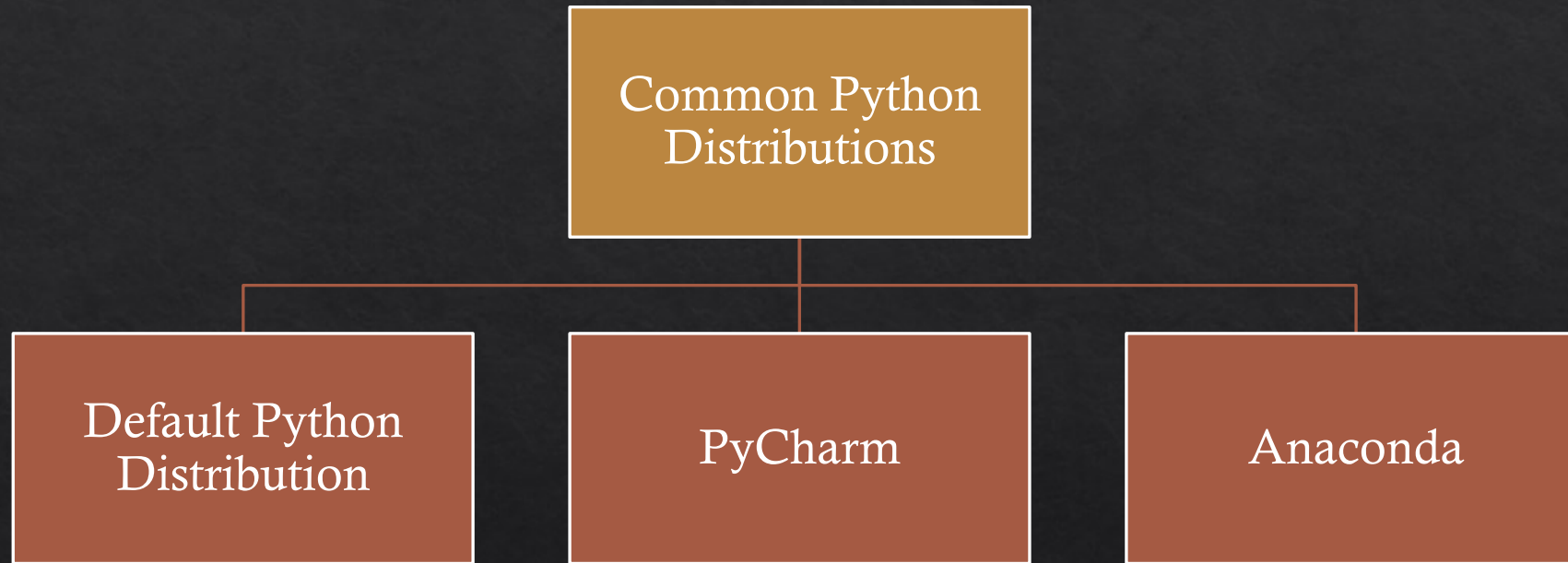
What is the Python?

Python Applications



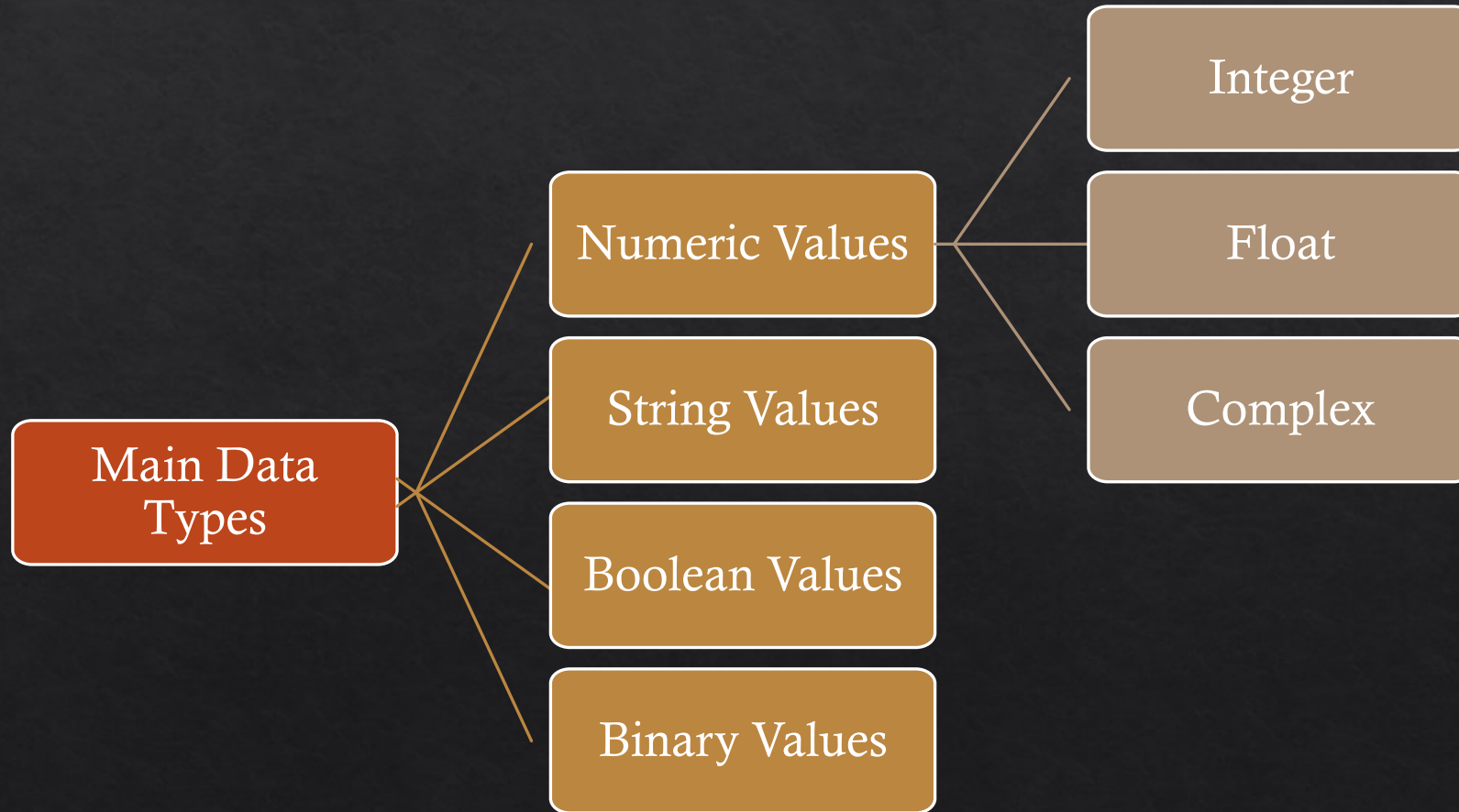
What is the Python?

Python Distributions



Data in Python

Data Types



Data in Python

Basic Operations on Data Types

Operator	Description
**	Exponentiation (raise to the power)
~, +, -	Complement, unary plus and minus (method names for the last two are +@ and -@)
*, /, %, //	Multiply, divide, modulo and floor division
+, -	Addition and subtraction
>>, <<	Right and left bitwise shift
&	Bitwise 'AND'
^	Bitwise exclusive 'OR'
 	Bitwise 'OR'
in, not in, is, is not, <, <=, >, >=, !=, ==	Comparison operators, equality operators, membership and identity operators
not	Boolean 'NOT'
and	Boolean 'AND'
or	Boolean 'OR'
=, %=, /=, //=, -=, +=, *=, **=	Assignment operators