

Python Programming

Presented by

Mariena A. A.

**Asst. Professor and Head, Department of Computer Science
Little Flower College, Guruvayoor.**

Outline

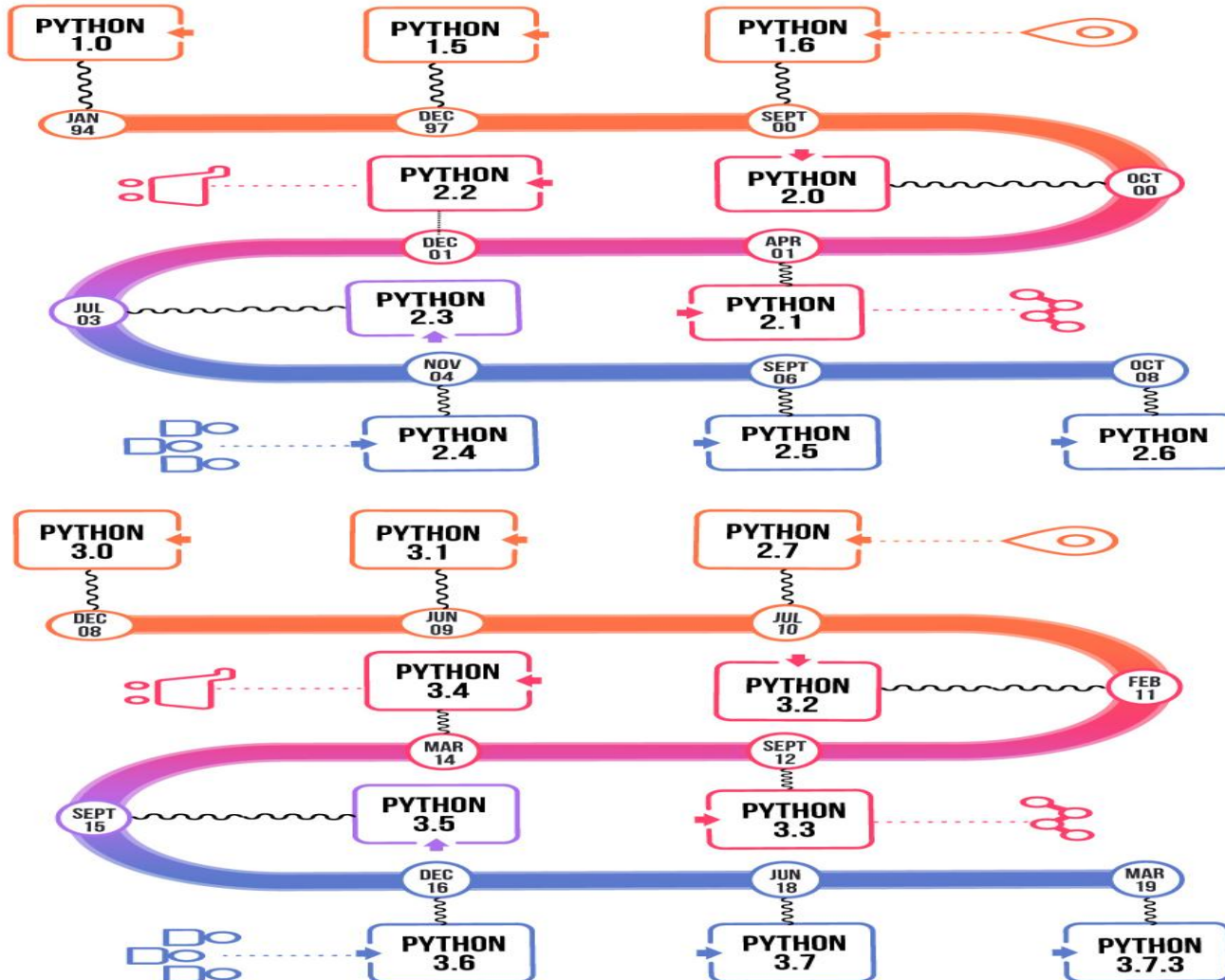
1. Introduction
2. History and Versions
3. Features Python
4. Identifiers
5. Recap

History of Python

- Guido Van Rossum gifted python programming in 1991.
- Monty python's flying circus is a fun show in 1974 in BBC.
- People were very addicted for this show in those days.
- Rossum was a big fan of this show he named his product as python
- So Rossum thought why can't we put this name to my programming language
- Versions: Python 1.0(1.6)
Python 2.0(2.7)
Python 3.0(3.8.2, 2020)

There is no back ward support. Python 3 does not support python 2.

History of Python



Features of Python

- Simple and easy to learn: 30 keywords are used, fewer LOC.
- Freeware and open source: No need Licence, Source code can update
- Platform independent: Can execute in any OS
- Portability: without any change in code any applications
- Dynamically typed: datatype is based on the assigned value (no type declaration)
- Extensibility: any language function can invoked in python
- Embedded :can embed python in any language
- No compilation and linking(directly we can execute)
- Python supports POP, OOPs, Scripting language and modular

Applications areas of Python

- Desktop Applications
- Web Applications
- Database Applications
- Networking Applications
- Machine Language Applications
- IOT Applications
- AI Applications
- Developing Games

Identifiers in Python

- Variables: Name given to memory location
- Identifiers: Name given to variables, functions, classes, objects, constants
- A name in python called identifier
- Alphabets and numbers and underscore
- First Character should be alphabet or underscore
- Case sensitive(total=0, TOTAL=0)
- No limit for number of characters
- Identifier names should not match with keywords

Data types and comments in python

- integer,float,complex,bool
- Str-characters,strings
- List,set,tuple,dictionary(dict),bytes,bytearray,range,none,frozenset

Declaration and initialization in C

- Initialization and declaration//assigning a variable itself treated as initialization and declaration, `type(a),id(a),print(a)` no need to specify explicitly.
- Based on the assigned value the type will be considered automatically:python
- `A=5`; a is a variable to store numeric data and assign 5;
- Comments are Ignored by interpreter Single line Comment `#` or `‘ ‘ ‘`
- Multiple assignments=`a=0;b=0;c=0` in C programming
- In Python `a=b=c=0` `a,b=5,6`
- `Sum,flag,name,version=0,1,"python",3.6`(variety of datatypes)
- No statement ends with semicolon

Thank you!

