1. Getting Started

- 2. Fastest growing Language
- 3. Most Popular Language
- 4. With Python we can write programs fast in less time and with fewer lines of code
- 5. Ideal Programming language to learn first
- 6. Python is used by:
- Software Engineers
- Data Analysts
- Accountants
- Mathematicians
- Scientists
- Network Engineers
- + Kids 😲
- 7. Multi-purpose programming language
- AI/ML
- Hacking
- Software Testing
- Desktop Apps
- Mobile Apps
- Web Apps
- Data Analysis
- Automation
- 8. Salary of an average Python Developer is 115,835 USD\$ according to Indeed.com as per March 2018
- Python is a high-level language which means it's easier for humans and the computer will take care of all the other complex tasks like memory management as we do in C++
- 10. Python is Cross-Platform language you can build apps
 that can run over Windows, Macintosh and Linux operating systems
- 11. Python has a huge community, you can get help from various mediums such as video tutorials, courses, books, blogs, articles and code snippets
- 12. Python has a large ecosystem of libraries, frameworks and tools. Whatever you are going to do, it's most likely that someone out there has already build that stuff. So, you don't need to re-invent the wheel or may get help
- 13. Python has been in the market for almost 20 Years









REASONS

- 14. Python 2 is legacy version and it's official support ended back in 2020, python 3 is the python for future
- 15. Python interpreter is basically a program which executes python code
- 16. In Programming, an expression is a piece of code which produces a value E.g: 2 + 2 => 4
- 17. Syntax is the grammar of computer programming languages
- 18. An IDE (Integrated Development Environment) is basically a code editor with some fancy productivity booster features
- 19. Debugging is finding and fixing bugs in a program
- 20. Auto-completion lets you complete the syntax of your code
- 21. Python programs have .py file extension
- Putting brackets in python () means calling a function which means executing that function
- 23. For Built –in Functions we use a metaphor, think of a remote of your Television, on that remote you have plenty of different built-in, default functions like volume up-down, channel change, turn-off etc.
- 24. Always use double or single quotes when working with strings
- 25. Linting is analyzing code for potential errors before execution, linters are small utility extensions which perform linting
- 26. Code formatting is making code cleaner and readable same as we format our articles, newspapers etc.
- 27. Code Snippets are the re-usable blocks of code
- 28. Unit testing involves writing a bunch of tests for our code and we can run these tests in an automated fashion to make sure that our code is behaving correctly
- 29. PEPs are python enhancement proposals
- 30. PEP 8 is the most common and famous PEP used by python developers
- 31. PEP 8 is a style guide for code formatting, if you follow it your code will end up being consistent
- 32. A Style guide is a document which defines a bunch of rules for formatting code
- 33. Formatter Autopep 8 is the official PEP formatter tool that comes with the official python extension and is most commonly used by python developers
- 34. FormatOnSave is the feature we can use in VSCode to format our code according to the PEP 8 rules by formatter autopep 8 on saving the file
- 35. We can use the code runner extension in VSCode for running our code
- 36. Code Runner now comes built-in VSCode
- 37. Python >>> 1- Language 2- Implementation
- 38. Python Language is the specification that defines a set of rules and grammar for writing python code

- 39. Python implementation is a program which understands the python rules and can execute python code
- 40. CPython is the default implementation written in C
- 41. Jython is written in Java
- 42. IronPython is written in C#
- 43. PyPy is a subset of Python itself
- 44. The technical reason behind having a variety of these implementations is one can use respective implementation for adding snippets of that language easily
- 45. Computers understand machine code
- 46. We Humans understand text based languages like python, C etc.
- 47. A C Compiler is a program which converts C code into machine code
- 48. Machine code is specific to the type of computer processor (Windows PC >< MAC)
- 49. Java Byte Code is a portable language not specific to a hardware platform
- 50. Java Virtual Machine (JVM) converts Java Byte Code into Machine Code
- 51. JVM Windows knows how to convert Java byte code into a Machine code that windows processor can understand
- 52. Python code when executed using Jython converts initially to Java bytecode which provides developer the ability to add Java snippets









