Objective: To Get Job as Python Developer

Course Title: Python

- 1. Core Python
- 2. Adv Python
- 3. Data Science Tools (Numpy, Pandas, Matplotlib)
- 4. Case Studies
- 5. Platforms
 - a. HackerRank
 - b. Leetcode
 - c. CodeChef
 - d. GeeksforGeeks
- 6. Mini Project

Class Timings: 7:15 AM — 8:50AM (MON-SAT)

Durations: 60-70 Sessions

Completing Course: Certificate from NARESH IT

HackerRank (2 Certificates)

Leetcode (Rank) CodeChef(Badges)

Anyone can learn python

This course for all the people

- 1. Fresher
- 2. Data Science & Al
- 3. Web Development (Django & Flask)
- 4. Big Data and Data Engineering
- 5. Testing (Selenium with Python)
- 6. Cloud Computing (AWS)
- 7. DevOPS
- 8. BlockChain
- 9. CyberSecurity
- 10. Automation
 - a. Web Scraping
 - b. Adimin

TelegramID: codewithsatishgupta

Introduction to Languages

What is Language?
Types of languages

Introduction to Translators

Compiler Interpreter

What is Scripting Language?

Types of Script

Programming Languages v/s Scripting Languages

Difference between Scripting and Programming languages

What is programming paradigm?

Procedural programming paradigm

Object oriented programming paradigm

What is Language?

Language is a software which provides set of instructions to communicate with computer.

Language acts as mediator between user and computer.

Language is used to build programs or softwares or applications.

Types of programming languages

- 1. Low Level Programming Languages
- 2. High Level Programming Languages

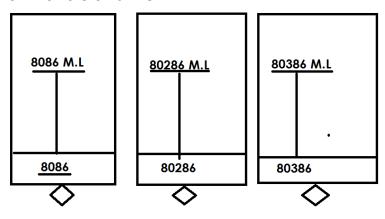
Low Level Programming Languages

Computer understandable languages are called low level programming languages.

- 1. Machine Language
- 2. Assembly Language

Machine Language

Machine language is a binary language, where instructions are given in the form of 0's and 1's.



Advantage of Machine Language

- 1. It is only language which understand by computer
- 2. Not required any translators
- 3. It efficient in processing instructions

Disadvantage

- 1. It is understand by machines
- 2. Not easy to understand by programmer.
- 3. These are hardware dependent

Assembly Language

Assembly is language is low level programming language. In Assembly language instructions are not given in 0's and 1's Instructions are given in the form of mnemonics (verbs)

Machine Language (8086) Assembly Language (8086)

10101010 MOVE 11111000 LOAD

What is assembler?

Assembler is a translator, which convert instructions of assembly language into machine language.

Advantage

1. Compare to machine language assembly language is easy to understand

Disadvantage

- **1.** Hardware dependent
- 2. Required translator

High Level Programming Language

High level programming languages are English like. These languages understand by programmers. High level languages are hardware independent.

Example: C,C++,Java,Python,C#.Net

What is translator?

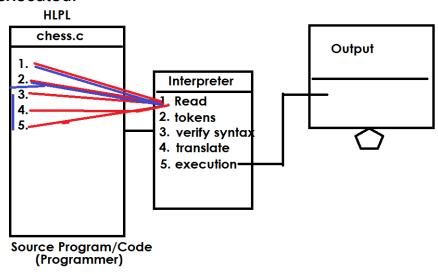
A translator is software which converts instructions of one language to another language.

- 1. Interpreter
- 2. Compiler

What is interpreter?

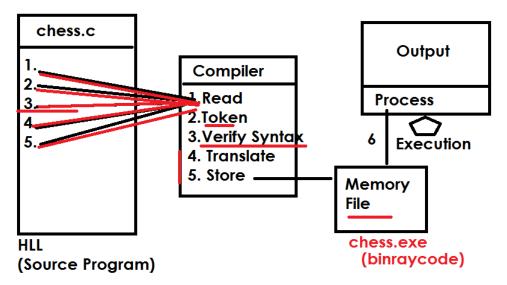
Interpreter is a translator, which translates and executes instructions line by line.

If there is a syntax error in one line, remaining lines are not translated and executed.



What is compiler?

Compiler is a translator, which translate whole program and execute.



If there is an error in one line, compiler stops translating but continue verifying syntax. Compiler shows/display all syntax errors.

What is difference between interpreter and compiler?

Interpreter	Compiler
Translates and execute instructions	Translates whole program and
line by line	execute
If there is an error in one line rest of	If there is an error in one line it stop
the statements are not translated	translating but continue verifying
and executed	syntax
It shows one error	It shows all errors
Debugging is complex	Debugging is easy
Cannot store	Can store translated code
It required translation every time	It required translation only one time
before execution	

What is scripting language?

Scripting language is one type of programming language but used for writing scripts.

Script is a small program executed within another program. Scripts are embedded within another program.

Scripts cannot execute individually it required another program to run.

Example: JavaScript, TypeScript, VBScript, PHP

A programming language can have the features of scripting language. A scripting language cannot have the features of programming language. Scripts are used for automation.

What is programming paradigm?

A programming paradigm defines set of rules and regulations for writing program.

- 1. POP → Procedural Oriented Programming
- 2. MOP → Modular Oriented Programming
- 3. OOP → Object Oriented Programming
- 4. SOP → Structured Oriented Programming

Example: Java is OOPL, C POPL, C++ is OOPL, Python POPL, OOPL

Introduction to Python What is Python? WHY PYTHON? History Features – Dynamic, Interpreted, Object oriented, Embeddable, Extensible, Large standard libraries, Free and Open source Why Python is General Language? Limitations of Python What is PSF? Python Python applications implementations Python versions PYTHON IN Difference between Python 2.x and 3.x REALTIME INDUSTRY Difference between Python 3.7 and 3.8 Software Development **Architectures**

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Only Whatsup