PYTHON (FAST TRACK)
==========
NAME: SATHEESH GUPTA
20 YEARS
C,C++,DS AND ALG
FULL STACK JAVA
FULL STACK PYTHON

Course Timinings : 11:00am:1:30pm (MON-SAT)
Duration : 40 sessions

PYTHON
1.PYTHON
2.PYTHON FOR DATASCIENCE

FULL STACK PYTHON (WEB DEVELOPER)
1. PYTHON
2. PYTHON FOR DATASCIENCE (NUMPY,PANDAS,MATPLOTLIB)
3. UI (HTML,JAVASCRIPT,CSS,BOOTSTRAP)
4. DJANGO,RESTAPI
5. DATABASES(MYSQL,MONOGODB)
6. TOOLS (GITHUB,DOCKER,..)

AI
DS
WEBDEVELOPMENT
TESTING
WEBSCRAPING
BA/DA
DATA ENG
CLOUD
DEVEOPS

INTERVIEWS
==========
CODING (MAANG)
- LEET CODE
- HACKER RANK
- CODE CHEF
- GEEKS FOR GEEKS

TIME COMPLEX
SPACE COMPLEX
FAQ'S
POC'S

CAPSTONE PROJECT
500+ PROGRAMS 500

==========
CORE PYTHON:
1. INTRODUCTION TO PROGRAMMING LANGUAGES
2. INTRODUCTION TO PYTHON
3. LANGUAGE FUNDAMENTALS
5. CONTROL STATEMENTS
6. DATA STRUCTURES OR COLLECTIONS
7. FUNCTIONS
8. MODULES
9. PACKAGES

ADV PYTHON

10. OBJECT ORIENTED PROGRAMMING(OOP)
11. EXCEPTION HANDLING
12. REGULAR EXPRESSIONS
13. OPERATING SYSTEM MODULE
14. DATETIME AND CALENDAR
15. PYTHON DATABASE COMMUNICATION
16. FILES
17. GARBAGE COLLECTION
18. GUI PROGRAMMING USING TKINTER
19. NETOWKRING SOCKET MODULE

PYTHON FOR DATASCIENCE
20. NUMPY
21. PANDAS
22. MATPLOTLIB
==========
NOTES WILL BE UPLOADED IN GOOGLE CLASSROOM

email: pythonbygupta@gmail.com
telegram: codewithsatishgupta
==========
INTRODUCTION TO PROGRAMMING LANGUAGES
==========

Content
=======
1. What is language?
2. Types of programming languages
3. Translators
    1. Assembler
    2. Interpreter
    3. compiler
4. programming language vs scripting language
5. programming paradigms
==========
==========
what is language?
language is a source of communication
language acts as meditor between user and computer
langauge provides set instructions executed by computer to perform specific operation
language is a software, which provides set of instructions to develop other softwares

types of programming languages
==========
programming languages are classified into 2 categories

1. low level programming languages
2. high level programming languages

low level programming language
==========
the languages which understand by computer are called low level programming langauges
1. machine language
2. assembly language

machine language
==========
machine language is called binary language
machine langauge instructions are in 0's and 1's
machine language in machine dependent, these instructions changes from one machine to another machine.

advantage of machine language
==========
1. not required translator
2. only a language understand by machine
3. efficient

disadvantage
==========
1. not easy to understand by programmers

assembly language
==========

assembly language is also low level langauge but instructions are not given in 0's and 1's. instruction in assembly language is given in the form nemonics(verbs)

machine language	assembly language
10101100	MOVE
11110000	LOAD

what is assembler?
assembler is translator used by assembly langauge to convert isntrutions of assembly langauge into machine langauge.

advantage
==========
1. easy to understand compare with machine langauge

disadvantage
==========
1. required translator

8086 machine langauge ===> 8086 assembly language
8088 machine langauge ==> 8088 assembly langauge

low level langauges are non protable or machine dependent.