

# Foundations of AI

Practical  
session

→ Initial development of AI

Explore → Eliza chatbot

learning Data Structure  
→ [Graph] ←

DSA  
↓

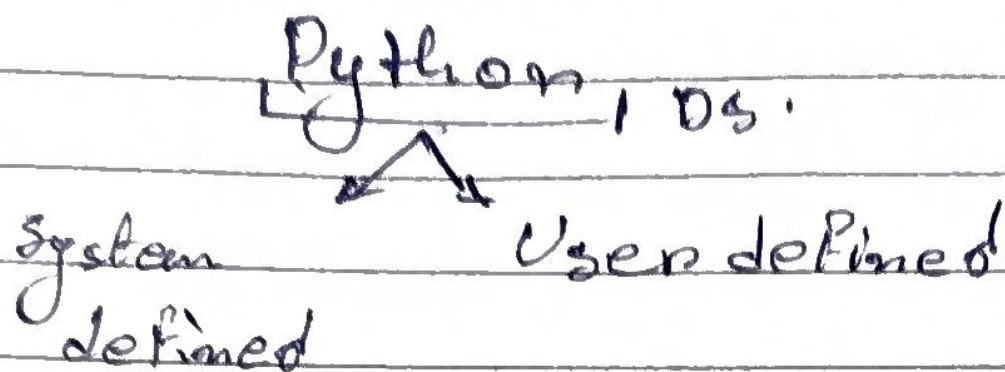
Data Structures

and  
Algorithms

↓  
[Essential]

↓  
Program work  
on Data

↓  
we need  
structure  
to communicate properly.



$x = 5$

int  
by default

arrays

$[1, 2, 3, 4]$

list in  
Python.

DS/Algo.

System def		User <del>Algo</del> def
Int	List/tuple	array / stack
char	set / Dictionary	queues
str		Hash Maps.

Foundational



advanced ↓

[Trees, Graphs]

Eg:

Library

↳ 5 books

↳ No sort need

But .

5000 books

↳ sort is need

↓  
[Scale] .

We need efficiency  
time complexity.  
space complexity.

Tool Recommendation

DSA Insight.

## AI/ML :

~~Rule~~ Rule Based AI

Statistics Based AI

No Machine  
Learning

ML

Deep learning

if-else,

gen AI

Logic Based

LLM .

could not  
go Far.