

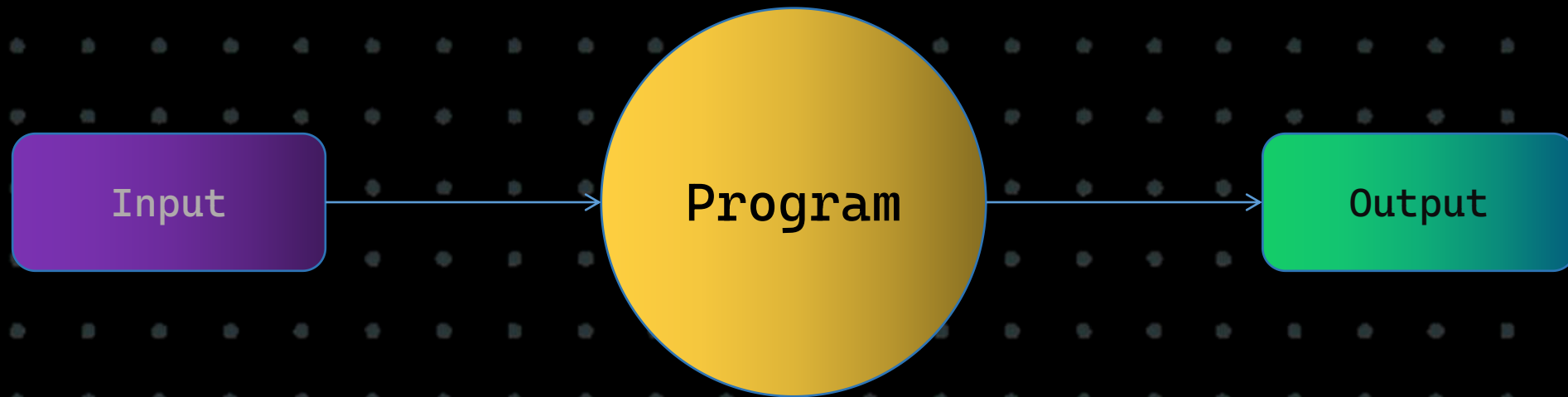


Python Fundamentals

IPO-Mechanism (Input-Processing-Output)

Anywhere and everywhere, where you want to get certain output from input you must have a **program** to get the desired result.

A program is a set of instruction that solve a particular problem statement.



- should be easy to understand
- less syntaxial complexity
- easy to reliable
- aware about space and time complexity

Python Character Set

set of valid characters that a specific language can recognize.
Python supports **Unicode Encoding Standards**.

↔ Letters	A-Z, a-z
↔ Digits	0-9
↔ Special symbols	space + - * / ** \ () [] { } // = ! = == < , > . ' " " " , ; : % ! & # < = > = @ _ (underscore)
↔ Whitespaces	Blank space, tabs (→), carriage return (↵), newline, formfeed.
↔ Other characters	Python can process all ASCII and Unicode characters as part of data or literals.

```
index.py
1 print("Block Letters: ", "A-B-C-D-E-F-G....Z \n")
2 print("Small Letters: ", "a-b-c-d-e-f-g....z \n")
3 print("Special Symbols: ", "! @ # $ % ^ & * ( )....{ ] : ;")
```

```
PS C:\transfer\new f drive\Godmode\tution\python\materials\Day 3> python index.py
Block Letters:  A-B-C-D-E-F-G....Z

Small Letters:  a-b-c-d-e-f-g....z

Special Symbols:  ! @ # $ % ^ & * ( )....{ ] : ;
PS C:\transfer\new f drive\Godmode\tution\python\materials\Day 3> []
```

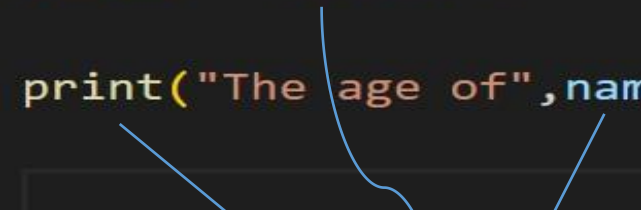
“I am the One who is living in everyone’s soul”



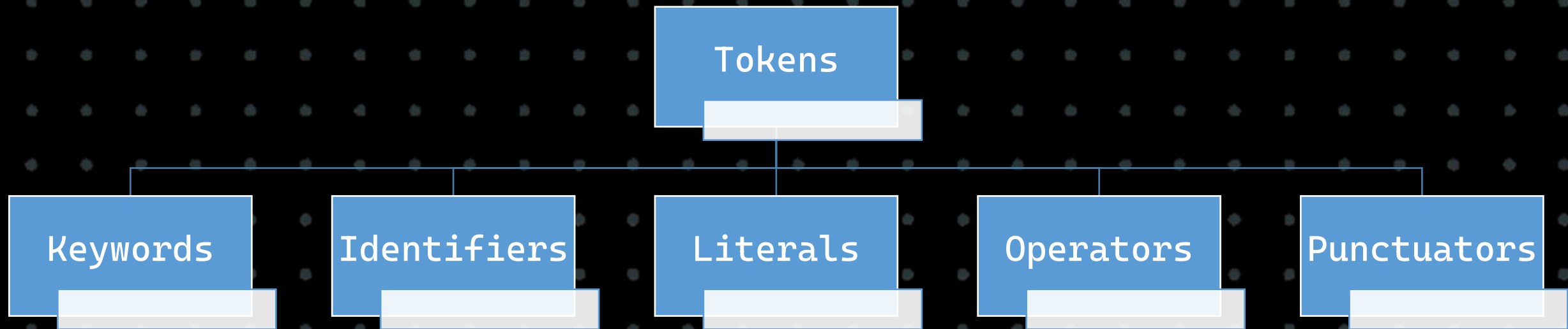
Lexical units or Tokens

In a passage of text every individual word and punctuation mark is called **Tokens**.

```
index2.py > ...  
1   name = "Khogen Mahato"  
2   age = 40  
3   income = 50000.25  
4  
5   print("The age of",name," is",age," and his income is",income)  
6  
7
```



Tokens (Smallest Individual Units)



See you on **Next Day**