

Foundation

Lecture - 23

Functions in C

→ Programming in C

→ Tokens & Identifiers

→ Datatypes & literals

→ flow of Control

↳ Conditional → if, if-else, if-else if-else etc

↳ loops → for, while, do while loop.
↑
focus

⇒ 25 to 30% of the syllabus ← Basics

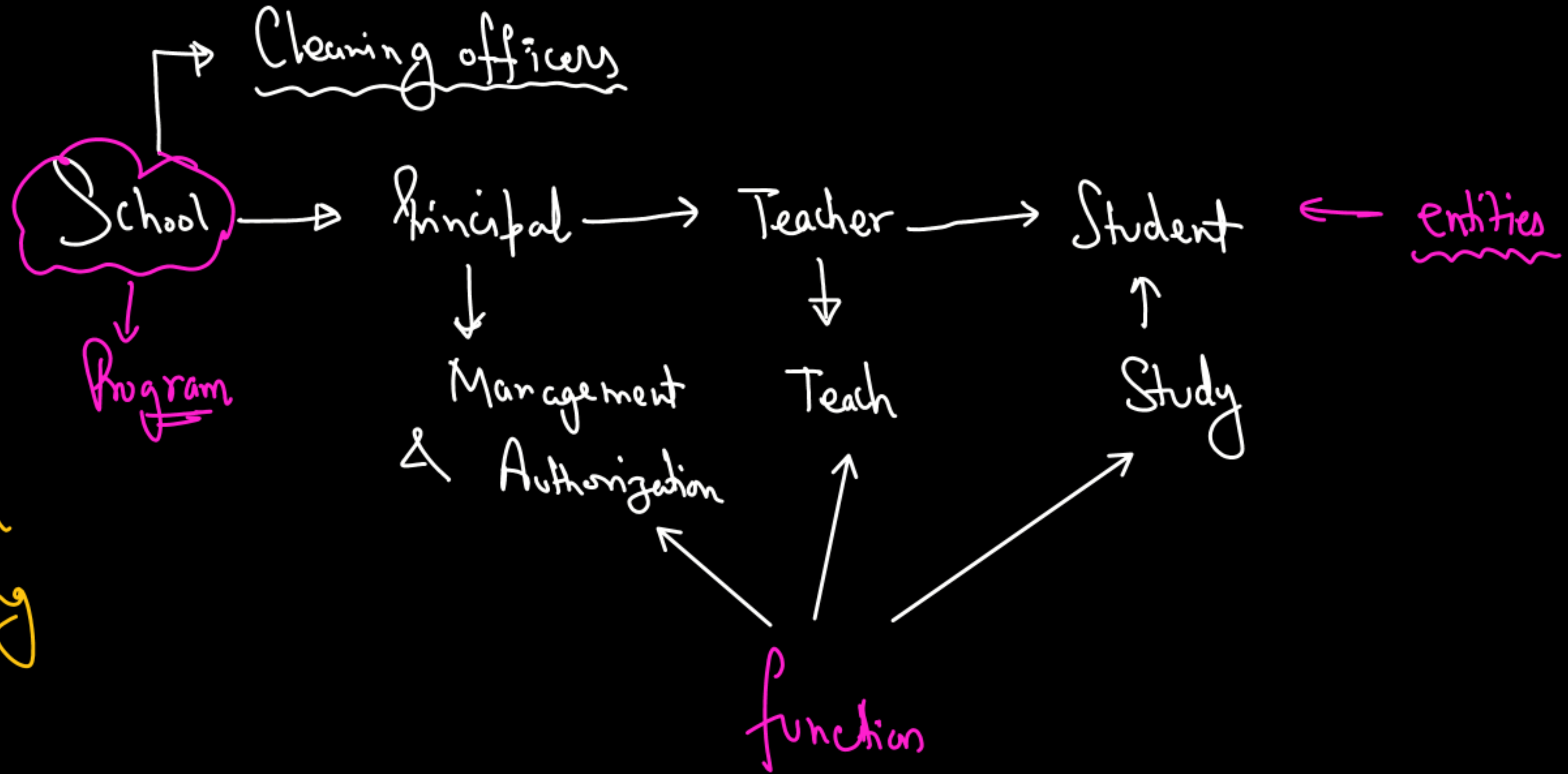
function () →

"A function is a set of
instruction code which is
written to perform a specific task
or set of tasks in a programming
language"

⇒ तुलना (Identification)

↳ There is a parentheses () at the end of a function name.

Ex: main (), sqrt (), pow () etc



functions

उदा. में Defined ← header files declared

→ Build-in fⁿ → the fⁿ that are pre-defined within the header files.
→ we can directly apply them by including <header> file.

Ex: <stdio.h> ← printf()
scanf()

} Direct Apply

to print the string

taking input

from user



[Assign the input to
the memory address]

<math.h> ←

Sqrt()

pow()

sin()

cos()

} Pre Defined

printf("%d", 25)

string ⇒ "25"

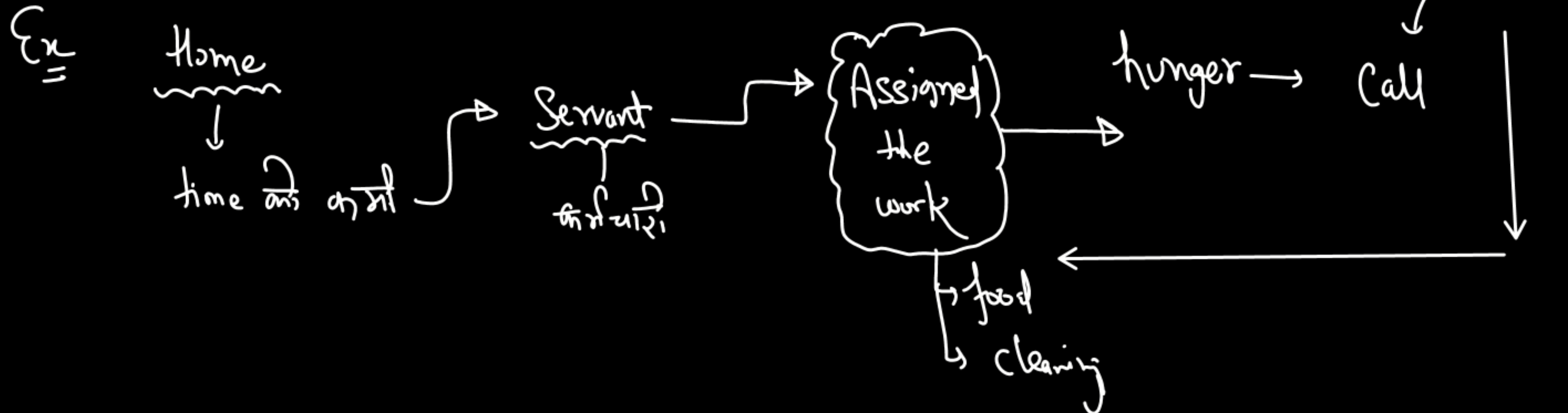
main () ← Entry Point
← [Built-in] ← Specific task

function (built-in) → declare in header
↓
[pre-compiled]
↑
file
we can access

User defined function :

↳ the function that are defined by the user. ← Programmer

→ Programmer writes the function for custom use.



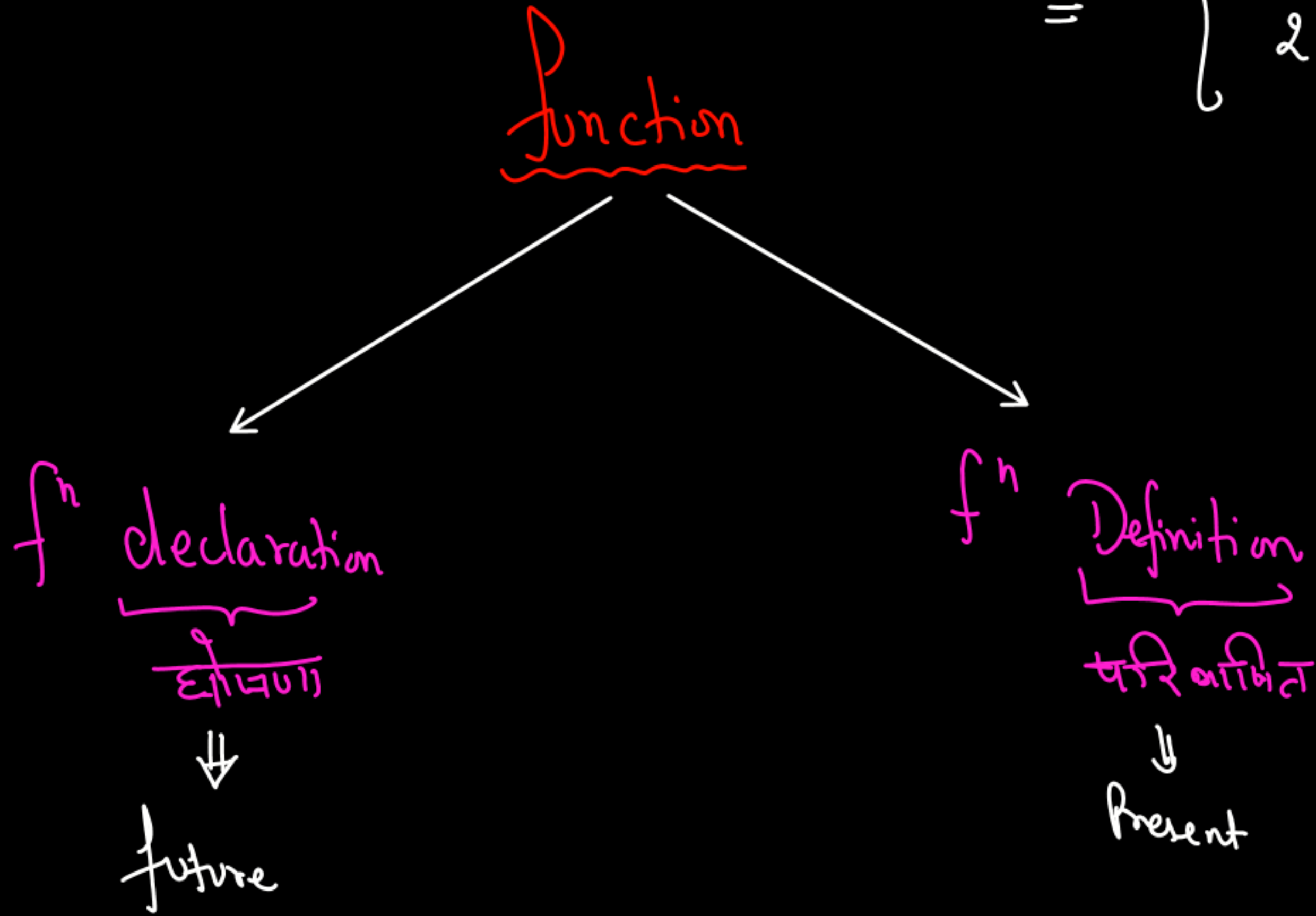
Home → fan → ON } Call ← ON/OFF
 ↓ ↘
 Revolve off

Index

S.N.	Topic Name	Page No
1	<u>Tokens</u>	04
2	Identification	06

declare { declare

The topic tokens is defined in page no. 4 of the book 'C'.



Page	1 → 300	Index
<u>defined</u>	1-3	—
	4-10	—
	10-25	—
	35-80	—

fⁿ Definition → The function must defined before main()
function without declaration

* अगर फंक्शन पहले से परिभाषित है तो उससे हम Index बना सकते हैं।

* If we already prepared an Index the we have to define each & every function written in index. declare

If we are defining a function after main(), then we have to declare the
function before main()

↓
घोषणा

$f(x);$ ← declare
 $a(x);$ ←
main () {

return 0 ;

}

$f(x) = \underbrace{x^2 + 2x + 1}_{\text{define}}$

$a(x) = \underbrace{x + 2}_{\text{define}}$

$s(a) = a + 3$
 $b(a) = a^2 + 2$ } defined

main () {

⋮

return 0 ;

}

* If we already define the function before main() then we don't need to declare these function