

Session 3

Function:

:- block of code perform specific task

□ proto type :- return - type function
name (input type - input type)

[2] function definition: -

contains the block of code to perform a specific task.

Return-type name (input ,) {
code
}

[3] Function call :-

4] return statement.
terminates the execution of a function and returns a value.

6 Recursion function

→ Function call itself

→ it is not recommended in embedded memory section

↓
volatile memory
RAM

↓
non volatile
memory

(ROM)

→ ROM: contains 5 segments.

	data
	bss
	Text
	data

• data: initialized data segment

1 Global initialized var.

2 Global initialized static var.

3 initialized local static variable

• **bss:** — uninitialized data segment:

- 1) uninitialized Global variables.
- 2) uninitialized Global static var.
- 3) Local static variables

• **Text:** — initialized and life time

• **ro data:** — read only data

- 1) read only data (const)

variable types

- 1) global variable
- 2) Local variable

→ global variable → definition section

scope: — all file

Not initialized → by default = 0

→ Local Variable :-

Scope : between { }

→ uninitialized Local Variable
garbage value

Storage Classes

→ Visibility and Life time :-

[1] auto :- with Local Variable

Local variable by default is auto

[2] register :- with Local Variable

Not allocate in memory, but in
general purpose register.

→ execution is very fast.

[3] extern :-

[4] static :- static variable

• data ليس يتغير Scope لا يتغير وهي تخزين