### FUNCTIONS AND POINTERS

#### **INTRODUCTION TO FUNCTION**

Function is defined as the block of organized, reusable code that is used to perform the specific action. A function is a subprogram of one or more statements that performs a specific task when called.

#### **Advantages of Functions:**

- 1. Code reusability
- 2. Better readability
- 3. Reduction in code redundancy
- 4. Easy to debug & test.

## **Classification of functions:**

- a) Based on who develops the function
- b) Based on the function prototype

#### **Based on the function prototype**

Function prototype is a declaration statement that identify function with function name, data type, a list of a arguments

#### Based on who develops the function

There are two types.

- Library functions
- User-defined functions

Library(Pre-defined) function	User defined function
Contains Pre-defined set of functions	The user defined the functions
User cannot understand the internal working	User can understand internal working
Source code is not visible	Source code is visible
User cannot modify the function	User can modify the function
Example: printf(), scanf().	Example: sum(), square()

#### Library Vs User-defined function

# Elements of user defined function (or) Steps in writing a function in a program

- 1. Function Declaration (Prototype declaration)
- 2. Function Call
- 3. Function Definition