



Learning Objectives

After studying this chapter, students will be able to:

- Understand the concept of function and their types.
- Know the difference between User defined and Built in functions.
- Know how to call a function.
- Understand the function arguments.
- Know Anonymous functions.
- Know Mathematical and some String functions.

7.1 Introduction

Functions are named blocks of code that are designed to do specific job. When you want to perform a particular task that you have defined in a function, you call the name of the function responsible for it. If you need to perform that task multiple times throughout your program, you don't need to type all the code for the same task again and again; you just call the function dedicated to handling that task, and the call tells Python to run the code inside the function. You'll find that using functions makes your programs easier to write, read, test, and fix errors.

Main advantages of functions are

- It avoids repetition and makes high degree of code reusing.
- It provides better modularity for your application.



Note

Functions are nothing but a group of related statements that perform a specific task.

7.1.1 Types of Functions

Basically, we can divide functions into the following types:

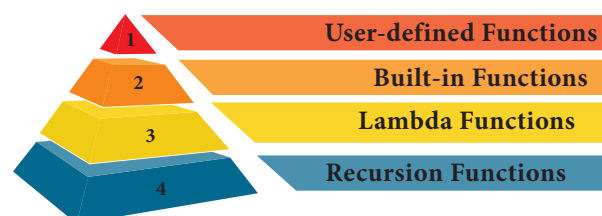


Figure – 7.1 – Types of Python Functions

Functions	Description
User-defined functions	Functions defined by the users themselves.
Built-in functions	Functions that are inbuilt with in Python.
Lambda functions	Functions that are anonymous un-named function.