

# Difference between Function and Procedure

A function returns the returning value/control to the code or calling function. Here, we have provided the difference between function and procedure in the table below, which is an essential topic for the GATE CSE exam.

## Key Differences between Function and Procedure

Function	Procedure
The function computes the outcome based on the inputs.	The procedure completes tasks in a specific order.
A function is a tool for calculating something based on input.	While a procedure is a collection of commands executed in a specific order.
A SELECT statement can include a function call.	A SELECT statement does not include a procedure call.
The resultant value or control is returned to the calling function or code.	It returns control to the code or calls the function but not a value.
DML commands like (Insert, Delete, and Update) are not allowed in a function.	DML statements can be utilized in procedures.
We can call a function via the procedure.	A procedure, on the other hand, cannot be called via a function.
It has to do with a particular expression.	It is not required to deal with a facial expression.

## Function and Procedure

The processes perform tasks in a specific order based on the specified inputs. On the other hand, a procedure would return the control to the calling function but not any value to the code. Over the years, various questions can be asked on both Function and Procedure in the GATE question paper. Let us understand each in detail.

## What is a Function?

A function in a programming language is a sequence of instructions that take some input and do some duties. A function can be predefined or created by the user. A function in a C program can be called numerous times for reusability and modularity.

A function is one of the most basic concepts in computer programming. It's used to compute anything based on a set of inputs. As a result, mathematics gave it its name. Functions can be user-defined or pre-defined. A block of code in the function program performs certain duties or functions.

## What is a Procedure?

A procedure is defined as the sequence of commands that are executed. For a compiler, it is a crucial programming construct. For procedure calls and returns, the procedure generates good code. It isn't concerned with an expression.

A procedure (sometimes known as a stored procedure) is a group of precompiled SQL statements saved in a database. It is a standard computing language subroutine or subprogram. A procedure must always have a name, a list of parameters, and SQL statements. It does not return a value in structured query language (or SQL). SQL is an important concept for the GATE exam. Both functions and procedures are referred to as subroutines in Java.

