



SNS COLLEGE OF TECHNOLOGY

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UNIT II

Functions in R Programming

A function accepts input arguments and produces the output by executing valid R commands that are inside the function.

Functions are useful when you want to perform a certain task multiple times.

In R Programming Language when you are creating a function the function name and the file in which you are creating the function need not be the same and you can have one or more functions in R.

Creating a Function in R Programming

Functions are created in R by using the command **function()**. The general structure of the function file is as follows:

```
f = function(arguments){  
    statements  
}
```

Here f = function name

Functions in R Programming

Note: In the above syntax f is the function name, this means that you are creating a function with name f which takes certain arguments and executes the following statements.

Parameters or Arguments in R Functions:

Parameters and arguments are same term in functions.

Parameters or arguments are the values passed into a function.

A function can have any number of arguments, they are separated by comma in paranthesis.

Example:

- R

```
# function to add 2 numbers  
add_num <- function(a,b)  
{
```

```
sum_result <- a+b
return(sum_result)
}
# calling add_num function
sum = add_num(35,34)
#printing result
print(sum)
```

Output

```
[1] 69
```

No. of Parameters:

Function should be called with right no. of parameters, neither less nor more or else it will give error.

Default Value of Parameter:

Some functions have default values, and you can also give default value in your user-defined functions. These values are used by functions if user doesn't pass any parameter value while calling a function.

Return Value:

You can use **return()** function if you want your function to return the result.

R Function Parameters

Calling a Function in R

After creating a Function, you have to call the function to use it.

Calling a function in R is very easy, you can call a function by writing its name and passing possible parameters value.

Passing Arguments to Functions in R Programming Language

There are several ways you can pass the arguments to the function:

- **Case 1:** Generally in R, the arguments are passed to the function in the same order as in the function definition.
- **Case 2:** If you do not want to follow any order what you can do is you can pass the arguments using the names of the arguments in any order.
- **Case 3:** If the arguments are not passed the default values are used to execute the function.