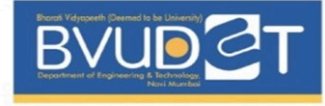# Bharati Vidyapeeth
Deemed to be University

BVUD&T

Department of Engineering and Technology
Plot no. KC-1, Sector 3, Kharghar, Navi Mumbai-410210

Subject: Computing Lab - III | Experiment No - 05 (3rd YEAR CSE-AIML 2023-2024)

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Marks (Out of 25):	Date of Submission: __ / __ / 2024

Aim: To implement functions and its types in R programming.

Theory:

Function: Functions in R are blocks of code that perform a specific task. They allow for modularity and reusability of code.

1. **Calling function without using any argument:** A function can be defined without any arguments. When called, it executes the predefined code block.

```
hello <- function() {
  print("Hello, world!")
}

# Calling the function
hello()
```

```
## [1] "Hello, world!"
```

2. **Calling function using default argument:** In R, you can define default values for function arguments. If a value is not provided when the function is called, it uses the default value.

```
greet <- function(name = "friend") {
  paste("Hello,", name)
}

# Calling the function without argument
greet()
```

```
## [1] "Hello, friend"
```

```
# Calling the function with an argument
greet("Kamran")
```

```
## [1] "Hello, Kamran"
```

3. **Calling function using variable length argument:** Functions in R can accept a variable number of arguments using .... This allows flexibility in function calling.

```
sum_all <- function(...) {
  sum(...)
}

# Calling the function with variable number of arguments
sum_all(1, 2, 3)
```

```
## [1] 6
```

```
sum_all(1, 2, 3, 4, 5)
```

```
## [1] 15
```

Conclusion:

This experiment introduced various types of functions in R programming. We learned how to define functions without arguments, with default arguments, and with variable length arguments.

Signature of Lab Incharge

(Prof. Supriya Khaitan)