

FUNCTIONS

1. What is a function ?

A function is a named block of reusable code that performs a specific task.

2. How to define a function ?

```
Syntax: def functionName():  
    statement 1  
    statement 2  
    - - -  
    - - -  
    statement n
```

```
Example: def helloWorld():  
    print("Hello, World!")
```

3. How to call a function ?

A function can be called from anywhere in the program using the function name.

Example: To call our helloWorld function we previously defined,

```
    print("This statement is executed before the  
function call")  
    helloWorld()  
    print("This statement is executed after the function  
call")
```

Output:

```
This statement is executed before the function call  
Hello, World!  
This statement is executed after the function call
```

As seen in the example, after the function call, the flow of control returns back to the next line after the function call

3. How to pass arguments to a function and return value ?

Parameters are passed to a function by specifying them within the parentheses of a function call.

Example:

```
def findMaximum(numberOne, numberTwo):  
    if numberOne > numberTwo:  
        return numberOne  
    else:  
        return numberTwo  
  
numberOne = 10  
numberTwo = 20  
greaterNumber = findMaximum(numberOne,  
numberTwo)
```

In this example, we have defined a function `findMaximum()` that takes two parameters, compares them both and returns the greater number. This returned value is stored in the variable `greaterNumber`.