

ntains the temporary data such as method/function parameters, return address and local variables.

## 2 Heap

This is dynamically allocated memory to a process during its run time.

## 3 Text

This includes the current activity represented by the value of Program Counter and the contents of the processor's registers.

## 4 Data

This section contains the global and static variables.

### Program

A program is a piece of code which may be a single line or millions of lines. A computer program is usually written by a computer programmer in a programming language. For example, here is a simple program written in C programming language –

```
#include <stdio.h>

int main() {
    printf("Hello, World!
");
    return 0;
}
```

A computer program is a collection of instructions that performs a specific task when executed by a computer. When we compare a program with a process, we can conclude that a process is a dynamic instance of a computer program.

A part of a computer program that performs a well-defined task is known as an algorithm. A collection of computer programs, libraries and related data are referred to as a software.

### Process Life Cycle

When a process executes, it passes through different states. These stages may differ in different operating systems, and the names of these states are also not