



# **SNS COLLEGE OF TECHNOLOGY**

**Coimbatore-35.**

**An Autonomous Institution**

**COURSE NAME : 23CST101– PROBLEM SOLVING & C PROGRAMMING**

**I YEAR/ I SEMESTER**

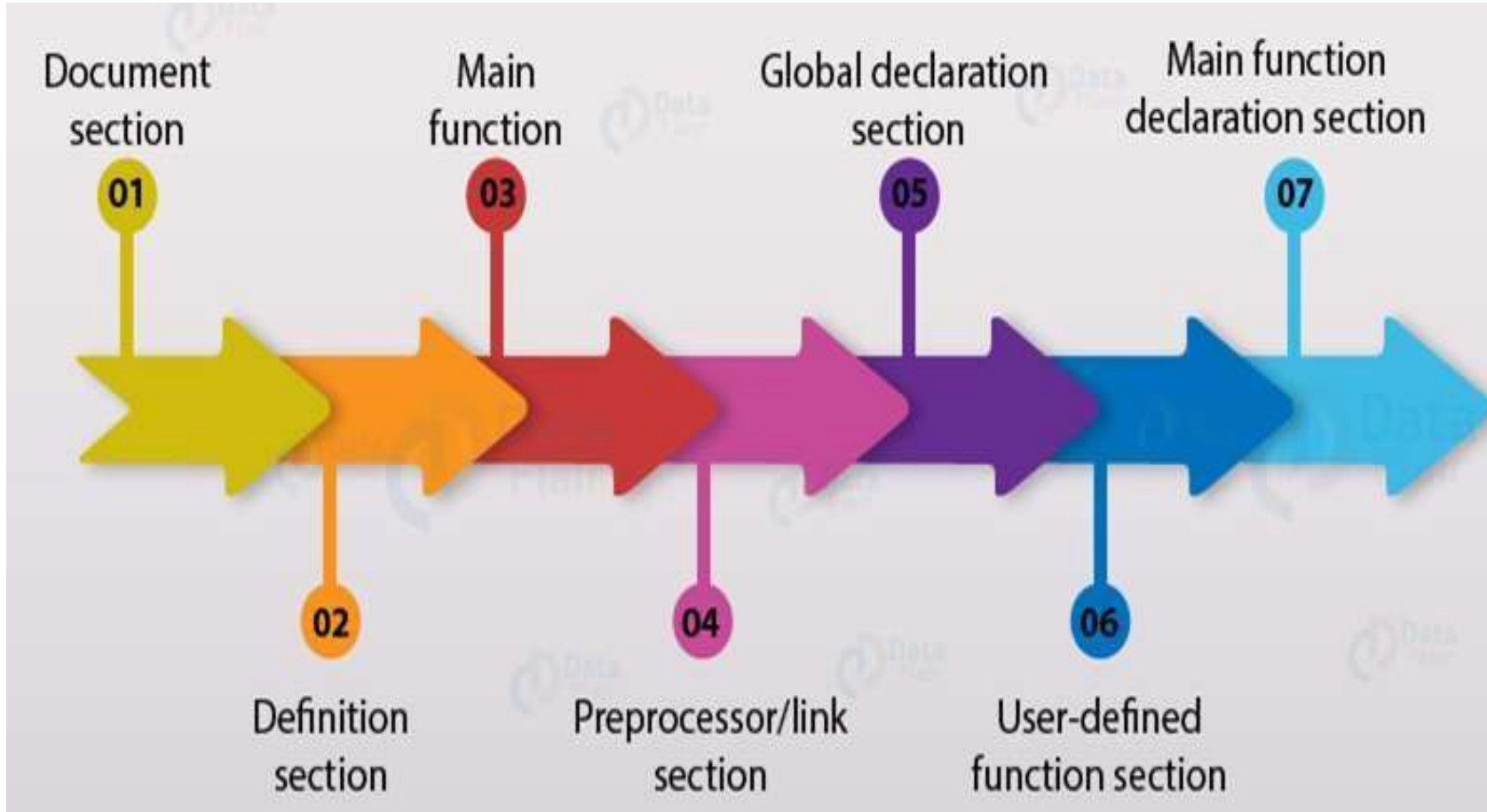
**UNIT-II C PROGRAMMING BASICS**

**Topic: Structure of a 'C' program**

Department of Computer Science and Engineering



# Structure of C Program





# Anatomy of a C Program



- **# include <stdio.h>** – is a preprocessor directive, includes all standard input-output files before compiling.
- **int main()** – from here the execution of the program starts.
- **{ (Opening bracket)** – beginning of any function in the program.
- **/\* some comments \*/** – Whatever is inside **/\*\_\_\_\_\_\*/** are not compiled and executed; they are only written for user understanding. These are known as multiline comments. Single line comments are represented with the help of 2 forward slashes **“//\_\_\_\_\_”**.
- **printf(“Hello World”)** – is included in the C stdio.h library, which helps to display the message on the output screen.
- **getch()** – helps to hold the screen.
- **return 0** – terminates the C program and returns a null value, that is, 0.
- **} (Closing brackets)** - end of the function.



# Example of C Program Structure

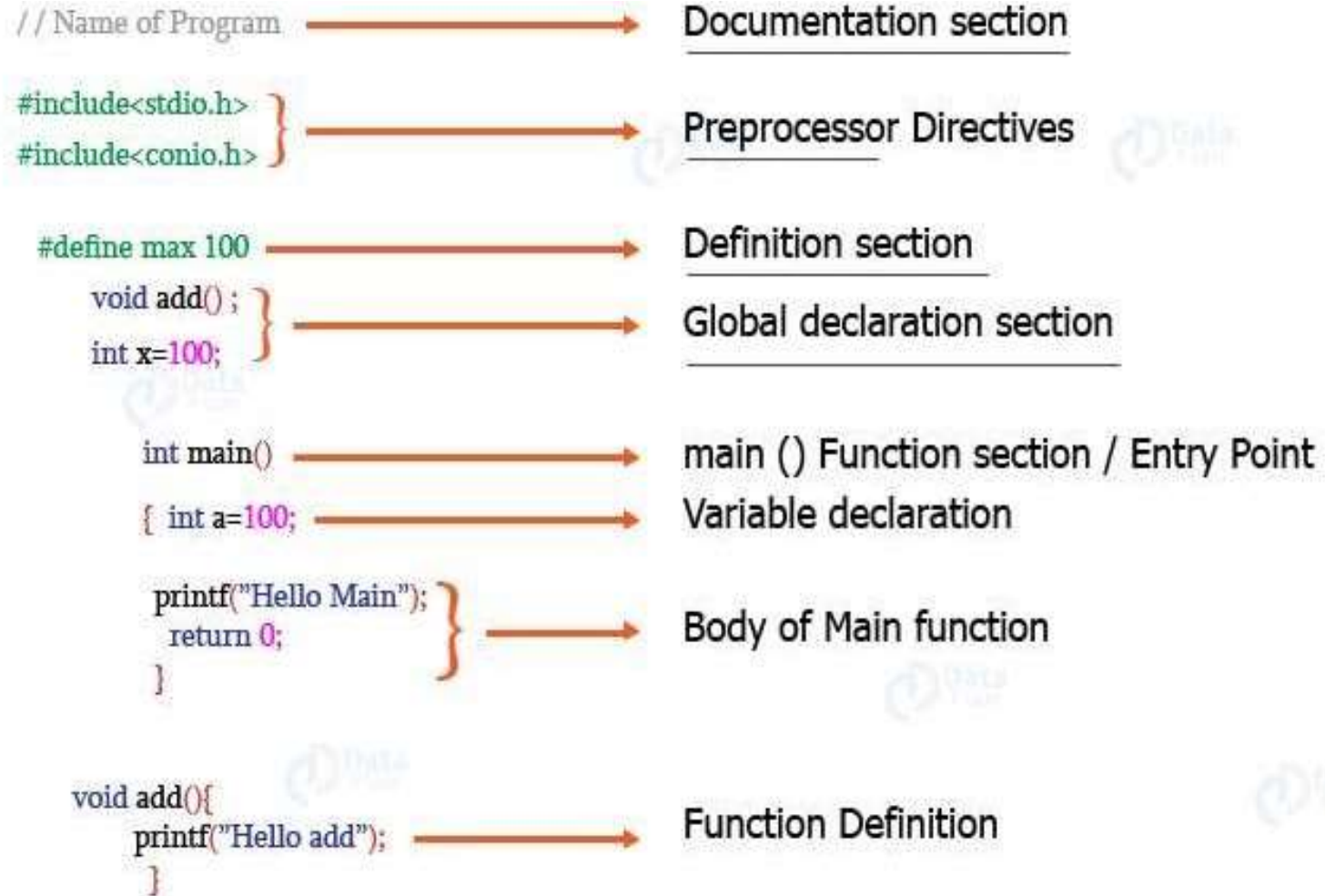


- The “Hello World!” example is the most popular and basic program that will help you get started with programming.
- This program helps you display the output “Hello World” on the output screen.

```
File Edit View Search Terminal Help
GNU nano 2.9.3
#include <stdio.h>
int main()
{
// Our first basic program in C
printf("Hello World!\n\n");
return 0;
}
```



# Basic Structure of C Program





# Basic Structure of C Program



## 1. Documentation Section

Can give **comments to make the program more interactive**. The compiler won't compile this and hence this portion would not be displayed on the output screen.

## 2. Preprocessor Directives Section

Involves the use of **header files** that are to included necessarily in the program.

## 3. Definition Section

Involves the **variable definition and declaration in C**.

## 4. Global Declaration Section

Used to define the **global variables** to be used in the programs, that means you can use these variables throughout the program.

## 5. Function Prototype Declaration Section

Gives the information about a function that includes, **the data type or the return type, the parameters passed or the arguments**.

## 6. Main function

Major section from where the execution of the program begins. The main section involves the **declaration and executable section**.

## 7. User-defined function section

When you want to define your **function that fulfills a particular requirement**, you can define them in this section.



**Thank You!**