



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35.

An Autonomous Institution

COURSE NAME : 19CST101 PROGRAMMING FOR PROBLEM SOLVING

I YEAR/ I SEMESTER

UNIT-II C PROGRAMMING BASICS

Topic: Structure of a 'C' program

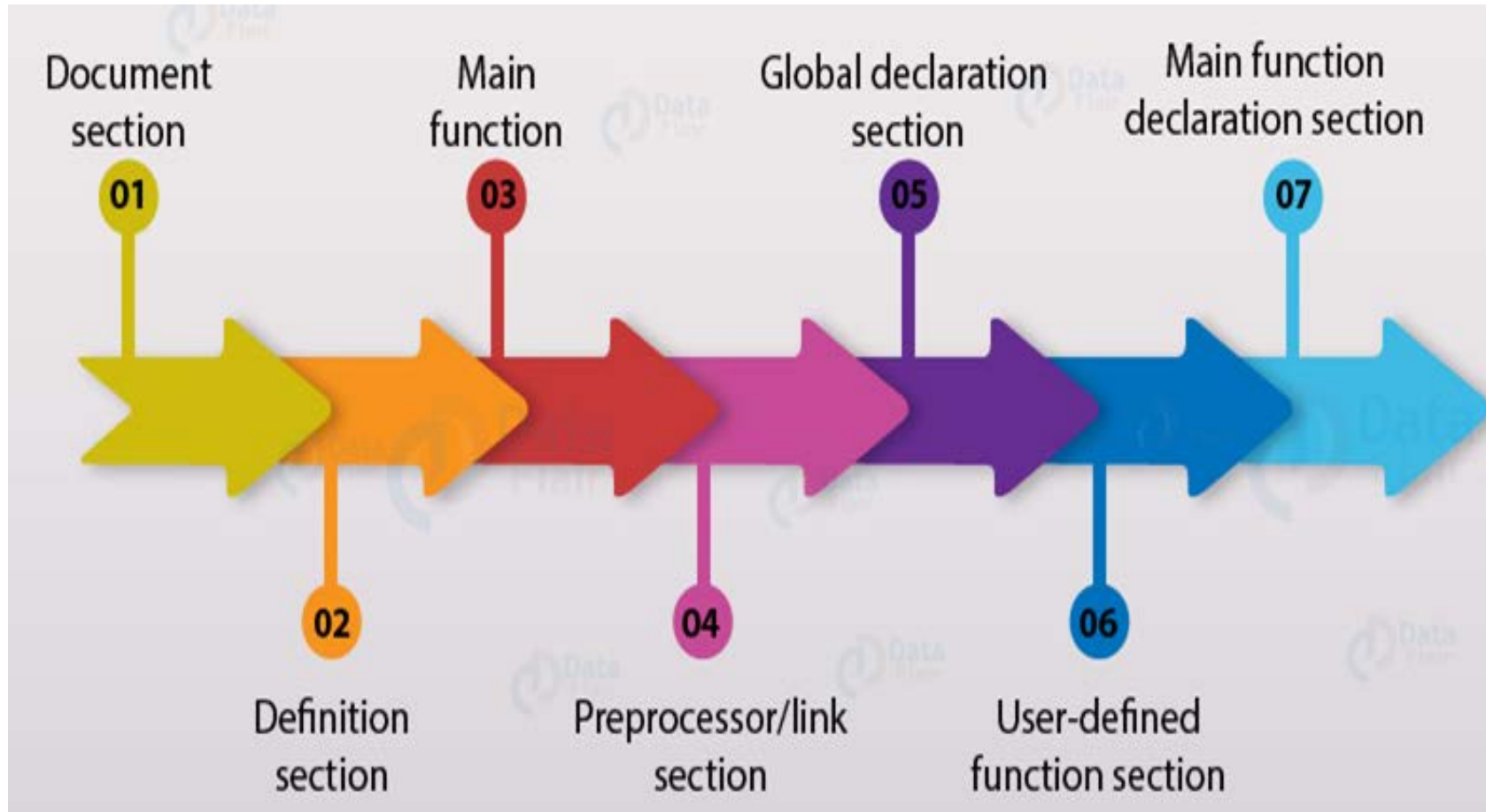
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Structure of C Program





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

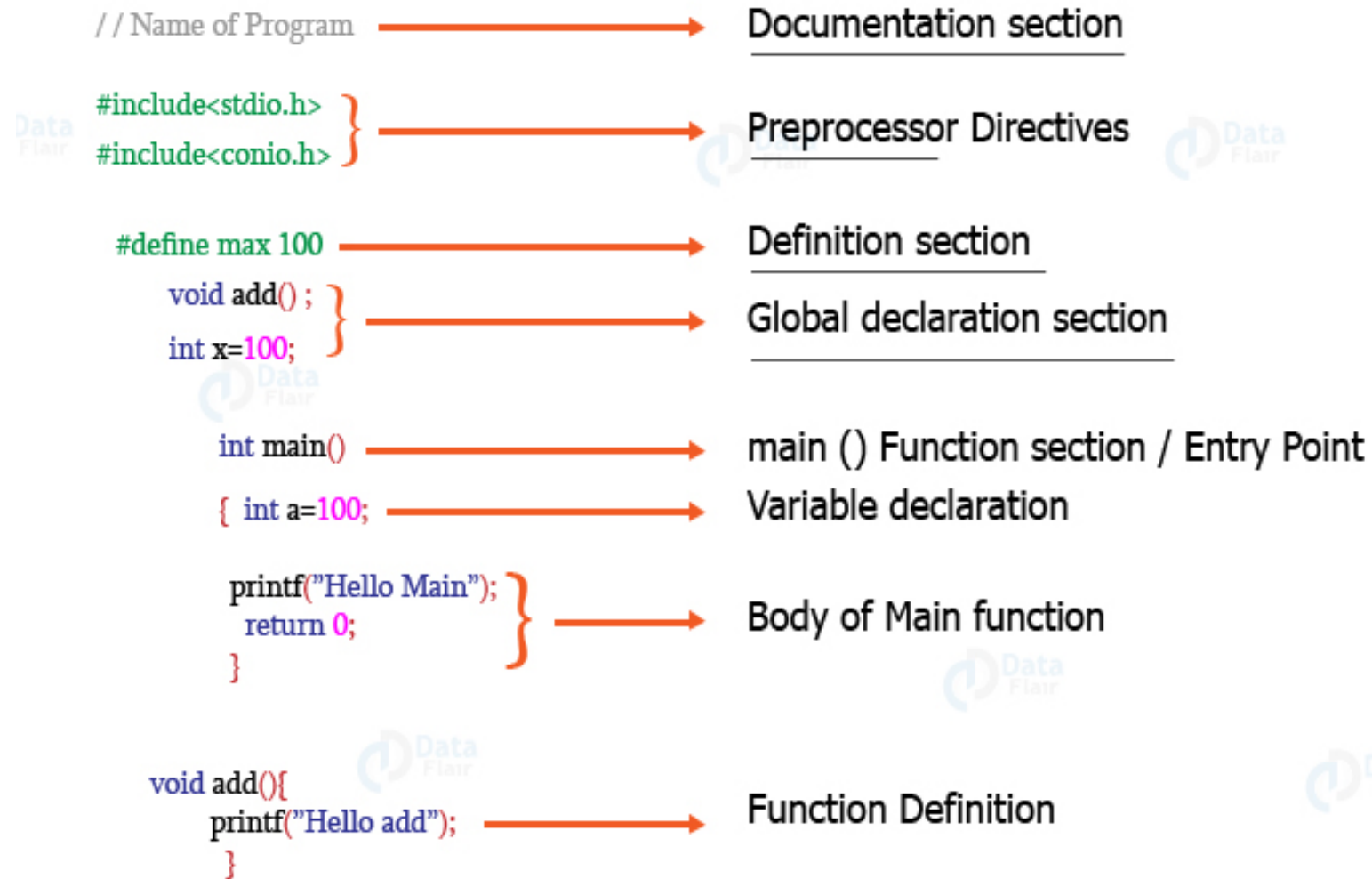


The components of the basic structure of a C program consists of 7 parts

1. Document section
2. Preprocessor/link Section
3. Definition section
4. Global declaration section
5. Function declaration section
6. Main function
7. User-defined function section



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.



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