

# SNS COLLEGE OF TECHNOLOGY Coimbatore-36.



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COURSE NAME: 23CST101- PROBLEM SOLVING & C PROGRAMMING

I YEAR/ I SEMESTER

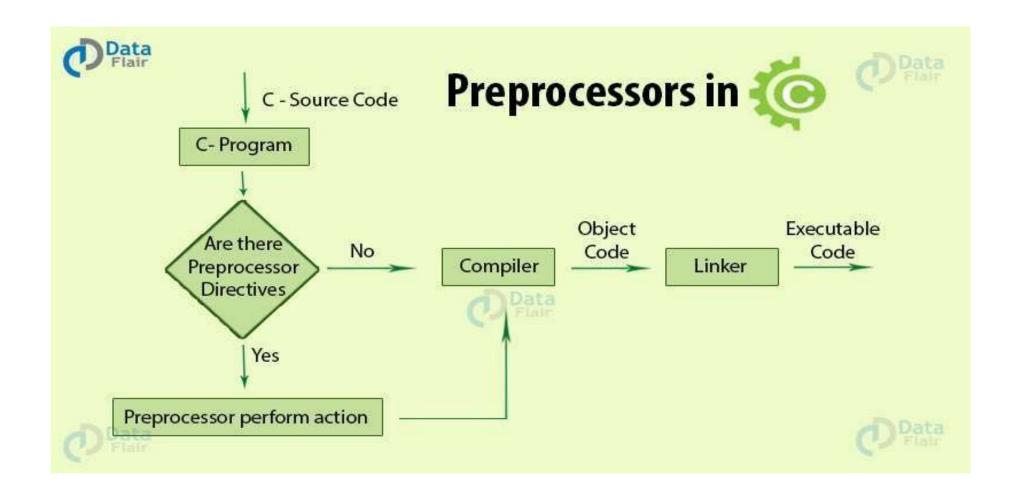
**UNIT-II C PROGRAMMING BASICS** 

**Preprocessor** 

**Department of Computer Science and Engineering** 











#### Example of Preprocessors in C

- Let us acknowledge the existence of preprocessors by considering a simple example.
- Suppose you forgot to use the **hash/pound** (#) symbol while working with the header file #**include**<**stdio.h**>, will your program work?
- Lets check. Example
- In the C programming language, you would find an error if you skip the # sign while defining a header file.





#### What are Preprocessor Directives in C?

- Preprocessor Directives are nothing but the commands we use in the preprocessor.
- In the C language, all of the preprocessor directives begin with a hash/pound (#) symbol.
- In C we can use preprocessor directives anywhere in our program.
- But, it is preferable to use them at the beginning of the program.
- This enhances the readability of the code.





Here is a table that summarizes the utility of preprocessors in C:

Preprocessor	Elucidation
#include	Used to insert a specific header from a file.
#define	Used as a replacement of a preprocessor macro.
#ifdef	Used when dealing with conditions. If the macro is defined, it returns true.
#endif	Used to close the preprocessor directive in accordance with a given condition.
#undef	Used to undefine a standard or user-defined header.
#pragma	Used to enable and disable certain features.
#ifndef	If the macro is not defined, it returns true.
#if	Used to check if the condition is true in compile time.
#else	Used to check the next condition if #if proves to be false in compile time.
#elif	Used as a combination of #else and #if.
#error	Used to print error on stderr.





