



SNS COLLEGE OF TECHNOLOGY

**Coimbatore-35
An Autonomous Institution**

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



DEPARTMENT OF INFORMATION TECHNOLOGY

PROGRAMMING FOR PROBLEM SOLVING

I YEAR

UNIT 2 – C PROGRAMMING BASICS

TOPIC 5 – CONSTANT , KEYWORD & DELIMITERS



CONSTANT



Constants

Constants are the terms that can't be changed during the execution of a program. For example: 1, 2.5, "Programming is easy." etc. In C, constants can be classified as:

Integer constants

Integer constants are the numeric constants(constant associated with number) without any fractional part or exponential part. There are three types of integer constants in C language: decimal constant(base 10), octal constant(base 8) and hexadecimal constant(base 16) .

Decimal digits: 0 1 2 3 4 5 6 7 8 9

Octal digits: 0 1 2 3 4 5 6 7

Hexadecimal digits: 0 1 2 3 4 5 6 7 8 9 A B C D E F.



CONSTANT



Floating-point constants

Floating point constants are the numeric constants that has either fractional form or exponent form.

For example:

-2.00.0000234-0.22E-5



CONSTANT



Character constants

Character constants are the constant which use single quotation around characters.

For example: 'a', 'l', 'm', 'F' etc.



CONSTANT



Escape Sequences

Sometimes, it is necessary to use newline(enter), tab, quotation mark etc. in the program which either cannot be typed or has special meaning in C programming. In such cases, escape sequence are used. For example: \n is used for newline. The backslash(\) causes "escape" from the normal way the characters are interpreted by the compiler.

Escape Sequences

Escape Sequences	Character
\b	Backspace
\f	Form feed
\n	Newline
\r	Return
\t	Horizontal tab
\v	Vertical tab
\\	Backslash
\'	Single quotation mark
\"	Double quotation mark
\?	Question mark
\0	Null character

String constants

String constants are the constants which are enclosed in a pair of double-quote marks. For example:

"good" //string constant

"" //null string constant

" " //string constant of six white space

"x" //string constant having single character.

"Earth is round\n" //prints string with newline



KEYWORD



Keywords :

- Keywords are the system defined identifiers.
- All keywords have fixed meanings that do not change.
- White spaces are not allowed in keywords.
- Keyword may not be used as an identifier.
- It is strongly recommended that keywords should be in lower case letters.
- There are totally **32(Thirty Two) keywords** used in a C programming.



INTRODUCTION TO C PROGRAMMING



int	float	double	long
short	signed	unsigned	const
if	else	switch	break
default	do	while	for
register	extern	static	struct
typedef	enum	return	sizeof
goto	union	auto	case
void	char	continue	volatile



DELIMITERS



C' Delimiters

Delimiters are the symbols, which has some syntactic meaning and has got significance.

Symbol	Name	Meaning
#	Hash	Pre-processor directive
,	comma	Variable delimiters (to separate list of variables)
:	colon	Label delimiters
;	Semi colon	Statement delimiters
()	parenthesis	Used in expressions or in functions
{ }	Curly braces	Used in blocking 'C' structure
[]	Square braces	Used along with arrays



THANK YOU