C Language

Chapter # 9
Elements of C language
Lecture: 07

Today's Lecture

▶ **Define identifier? Types of identifier.**

▶ **What are keywords?**

▶ **Define Constant and its types**

What is identifier

▶ An identifier is the name given to the variables , constant, function or labels in the program.

▶ A good identifier should be descriptive but short.

▶ An identifier in C language may consist of 31 characters. If the name of identifier is longer than 31 characters, the first 31 characters will be used. The remaining characters will be ignored by C compiler.

Rules for identifier

▶ The first character must be an alphabet or underscore (_).

▶ The identifier name must consist of only alphabetic characters, digits or underscore.

▶ The reserved words cannot be used as identifier name.

Types of identifier

1. Standard identifier

2. User-defined identifier

Standard identifier

▶ A type of identifier that has special meaning in C is known as standard identifier. C cannot use a standard identifier for its original purpose if it is redefined.

Example:

printf and scanf are examples of standard identifier.

User-defined identifier

▶ A type of identifier that is defined by the programmer to access memory location is known as user-defined identifier. These identifiers are used to store program data and program result.

Example:

Some example of user-defined identifiers are **a, marks, age** etc.

What are Keywords

▶ Keyword is a word in C language that has a predefined meaning and purpose.

▶ The meaning and purpose of a keyword is defined by the developer of the language.

▶ It cannot be changed or redefined by the user.

▶ Keywords are written in lowercase.

▶ The total number of keywords is 32.

List of keywords

Auto , do , if, void, while, int, switch, short etc.

Constant and its types

▶ A constant is a quantity that cannot be changed during program execution.

1. Numeric constants

2. Character constants

3. String constants

1. Numeric constant

▶ Numeric constant consist of numbers it can be further divided into two types.

1. **Integer constant** are numeric values without fraction or decimal point. Both positive or negative integer constant are used in C programs.

   Examples: 89, 48, -10, -56

1. **Floating point constant** are numeric values with fraction or decimal point. Both positive or negative floating point constant are used in C programs.

   Examples: 8.9, 40.83, -10.22, -56.77

2. Character constant

▶ Any character written within single quotation mark is known as character constant. All alphabetic characters, digits, and special symbols can be used as character constants. The maximum length of a character constant is 1 character.

Example

'A'   'n'   '9'   '+'   '&'

3. String constant

▶ A collection of characters written double quotations mark is known as string or string constant. It may consist of any alphabetic characters, digits, and special symbols.

Example

"Pakistan"   "123"   "99-Mall Road, Lahore"

The End

Read this topic from your books and ask question if any confusion.

JAZAKALLAH