WELCOME TO C++ COURSE

WHAT YOU WILL LEARN

- BASICS OF C++
- IDENTIFIERS AND KEYWORDS
- DATA TYPES
- CLASSES AND OBJECTS
- IF-ELSE STATEMENT AND LOOPS
- INHERITANCE
- POINTERS

IDENTIFIERS –

IDENTIFIERS ARE THE NAMES TO IDENTIFY VARIOUS PROGRAMMING ELEMENT LIKE VARIABLES, ARRAYS AND FUNCTIONS

SOME RULES ARE VERY IMPORTANT WHILE DEFINING IDENTIFIERS

1 . IDENTIFIERS MUST CONTAINS LETTERS , UNDERSCORE,CHARACTER OR 0 TO 9 DIGITS

2. IDENTIFIER MUST START WITH LETTER (A – Z) OR UNDERSCORE .

3.IDENTIFIERS NOT CONTAIN OTHER CHARACTERS SUCH AS “ * ’’ , “ ; ’’ ETC.

KEYWORDS –

KEYWORDS ARE PREDEFINED WORDS THAT HAVE SPECIAL SIGNIFICANCE IN ANY LANGUAGE . INT , AUTO , BREAK ARE THE SOME OF THE KEYWORDS.

DATA TYPES –

1.INTEGRAL DATA TYPE : INTEGRAL DATA TYPE IS USED TO STORE INTEGERS AND INCLUDES

CHAR AND INT DATA TYPE.

- INT : NUMBER WITHOUT FRACTIONAL PART REPRESENT INTEGER DATA TYPE
- CHAR : CHAR DATA TYPE REFERS ALAPHABATE, NUMBERS AND OTHER CHARACTERS.

2. **FLOATING DATA TYPE :** FLOATING DATA TYPE IS USED TO STORE FRACTIONAL NUMBERS

3. **VOID DATA TYPE** : VOID DATA TYPE IS ONE OF THE WIDLY USED DATA TYPE.

VOID DATA TYPE IS USED FOR SPECIFYING EMPTY PARAMETER LIST TO

A FUNCTION AND RETURN TYPE FOR A FUNCTION.

CLASSES AND OBJECTS –

CLASSES IS A WAY TO BIND THE DATA TO ITS ASSCIATED FUNCTION TOGETHER .
IT ALLOWS THE DATA AND FUNCTION TO BE HIDDEN IF NECESSARY FROM EXTERNAL USE.

ACCSESS SPECIFIER IS VERY IMPORTANT ROLE PLAYS IN CLASSES AND OBJECT

1. **PUBLIC :**
   PUBLIC MEMBERS CAN ACCESS FROM OUTSIDE THE CLASS.
2. **PRIVATE :**
   PRIVATE MEMBERS CAN BE ACCESS ONLY INSIDE THE CLASS.

IF ACCESS SPECIFIER IS MISSING IT BY DEFAULT MEMBERS WILL BE PRIVATE

IF-ELSE STATEMENT

IF-ELSE STATEMENT IS A DECISION MAKING STATEMENT

IN IF-ELSE STATEMENT CONDITION IS TRUE THEN IF CODE BLOCK IS EXECUTED AND IF CONDITION IS FALSE THEN ELSE PART EXECUTED

LOOPS

A **loop statement** allows us to execute a **statement** or group of statements multiple times

TWO TYPES OF LOOPES

- WHILE LOOP
- FOR LOOP

INHERITANCE

C++ SUPPORTS THE CONCEPT OF REUSABILITY. ONCE A CLASS HAS BEEN WRITTEN AND TESTED , IT CAN BE ADAPTED BY OTHER PROGRAMMERS TO SUIT THEIR REQUIREMENT .

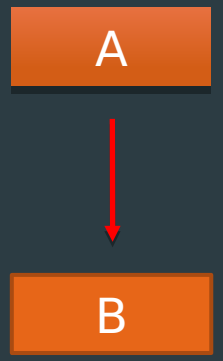
THIS IS BASICALLY DONE BY CREATING NEW CLASSES, REUSING THE PROPERTIES OF EXISTING ONES.

THE MECHANISM OF DERIVING A NEW CLASS FROM AN OLD ONE IS CALLED INHERITANCE.

THE OLD CLASS IS REFFERED TO AS THE BASE CLASS AND THE NEW ONE IS CALLED THE DERIVED CLASS OR SUB-CLASS

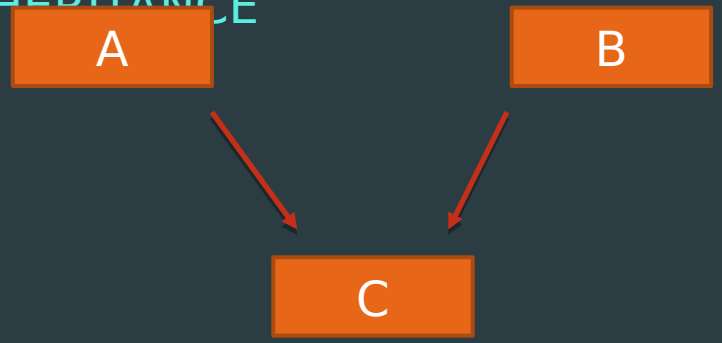
TYPES OF INHERITANCE

- SINGLE INHERITANCE



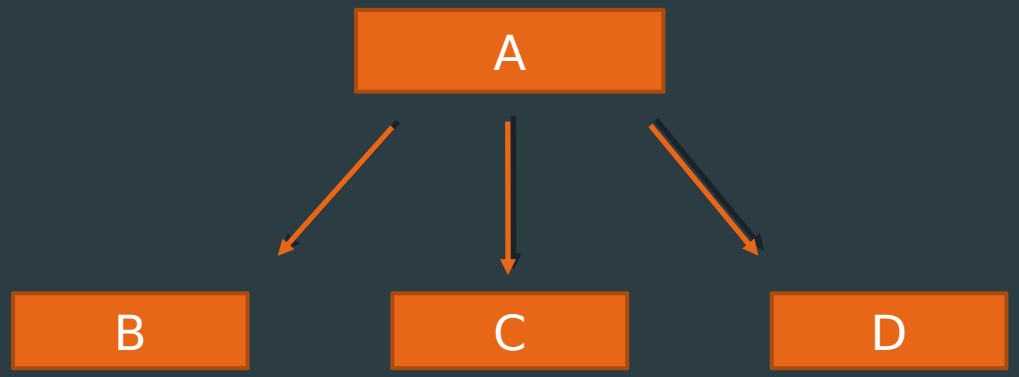
A DERIVE CLASS IS WITH ONLY ONE BASE CLASS IS CALLED SINGLE INHERITANCE.

- MULTIPLE INHERITANCE



DERIVE CLASS WITH MORE THAN ONE CLASS IS CALLED MULTIPLE INHERITANCE.

- HIERARCHIAL INHERITANCE



IN THIS TYPE OF INHERITANCE ONE CLASS MAY BE INHERITED MORE THAN ONE CLASS IS KNOWN AS HIERARCHIAL INHERITANCE.

POINTERS

A POINTERS IS A DERIVED DATA TYPE THAT REFERS TO ANOTHER DATA VARIABLES BY STORING THE VARIABLES MEMORY ADDRESS RATHER THAN DATA.

SYNTAX:-

DATATYPE *POINTER_VARIABLE

THANK YOU