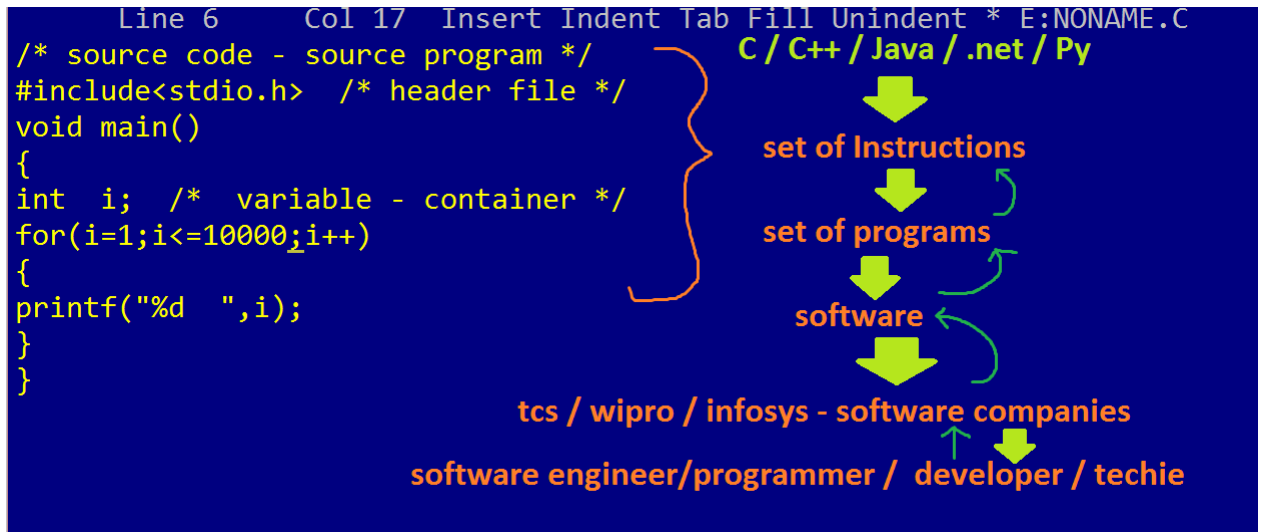


INTRODUCTION TO C

C is a

1.It is a high level / middle level programming language.

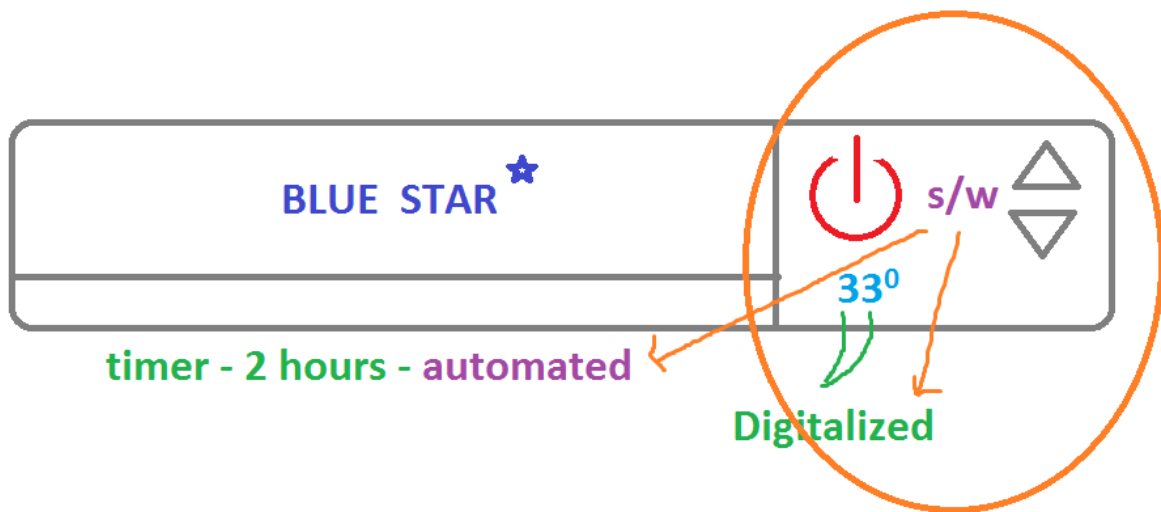
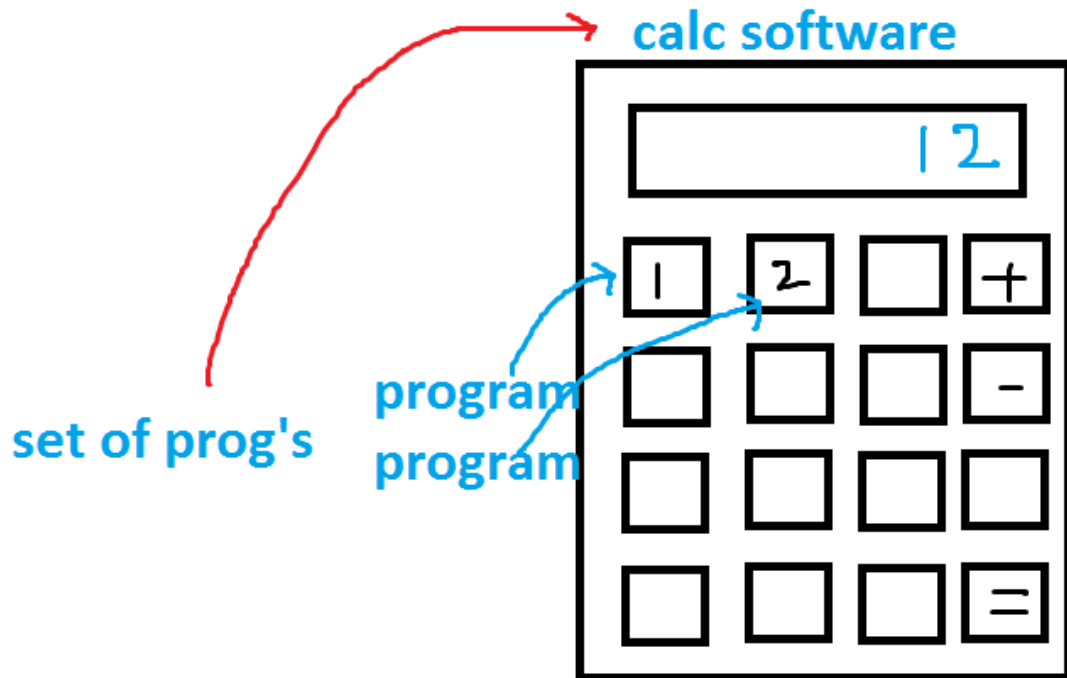


What is a program?

Set of instructions are called program

What is a software?

Set of programs is called software. As per IT Industry software is a digitalized and automated process.



We are having basically 2 type of software.

1.System software:

Eg: os, device drivers, translators

2.Application software

Eg: whatsapp, fb, insta,...

What is a language?

Generally the languages are used to communicate with others. For example the languages like telugu, English, hindi, Marathi etc are called human languages, which are used to communicate only with humans. But by using these languages we can't communicate with the machines. For that we are using the computer programming languages like C / C++ / java / Python / .net / Go / R language etc to create the programs [software]. These software making our work easy, faster and accurate.

Basically these languages are divided into 3 types.

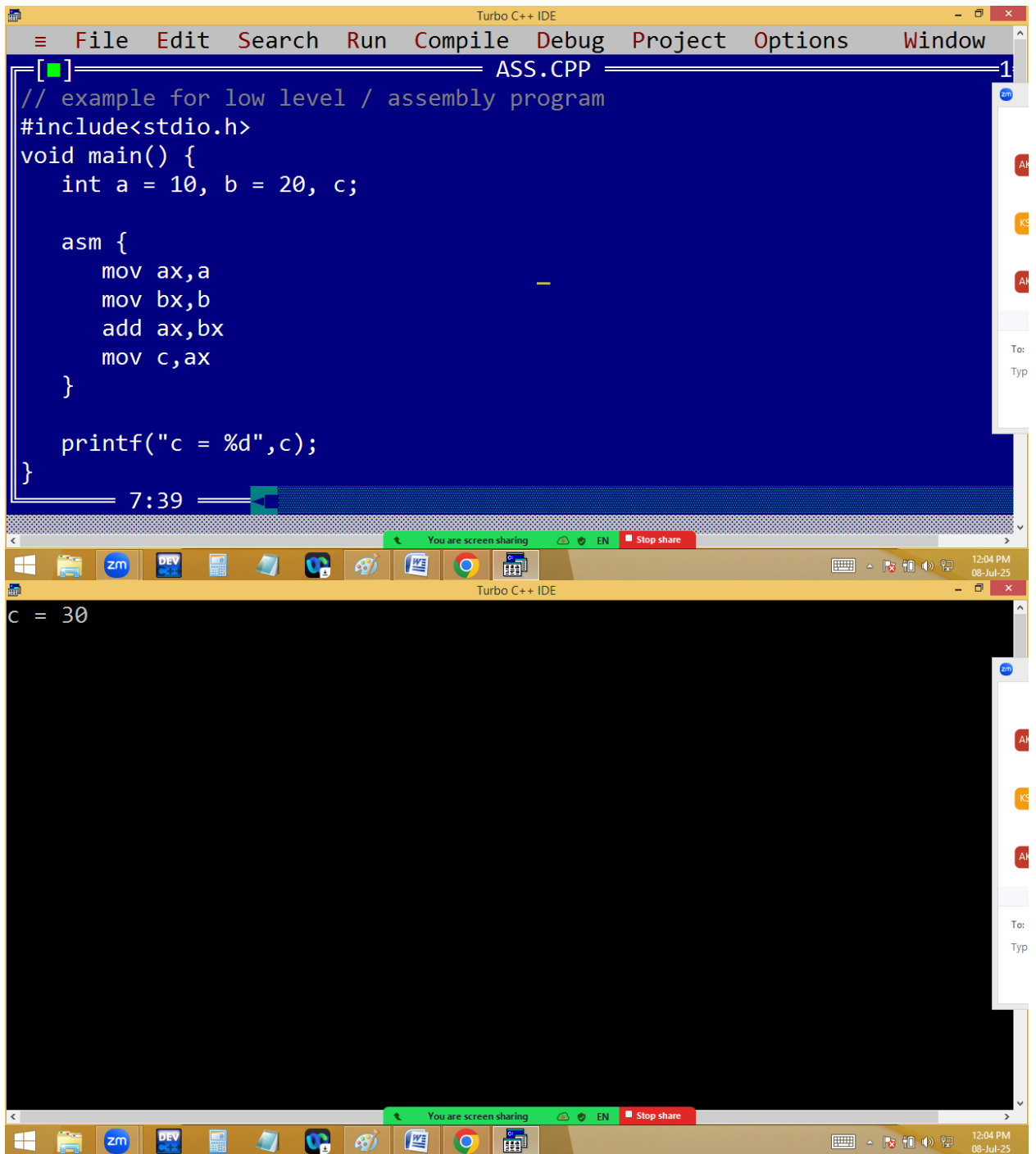
1. Machine language: Created with binary code and very difficult to read by the user.

Eg: 10001111

2. Low level / assembly language: Created with English like shortcuts called **MNEMONICS**.

Eg: add, sub,...

Example for assembly programming:



The screenshot displays the Turbo C++ IDE interface. The top menu bar includes File, Edit, Search, Run, Compile, Debug, Project, Options, and Window. The main editor window, titled 'ASS.CPP', contains the following C code:

```
// example for low level / assembly program
#include<stdio.h>
void main() {
    int a = 10, b = 20, c;

    asm {
        mov ax,a
        mov bx,b
        add ax,bx
        mov c,ax
    }

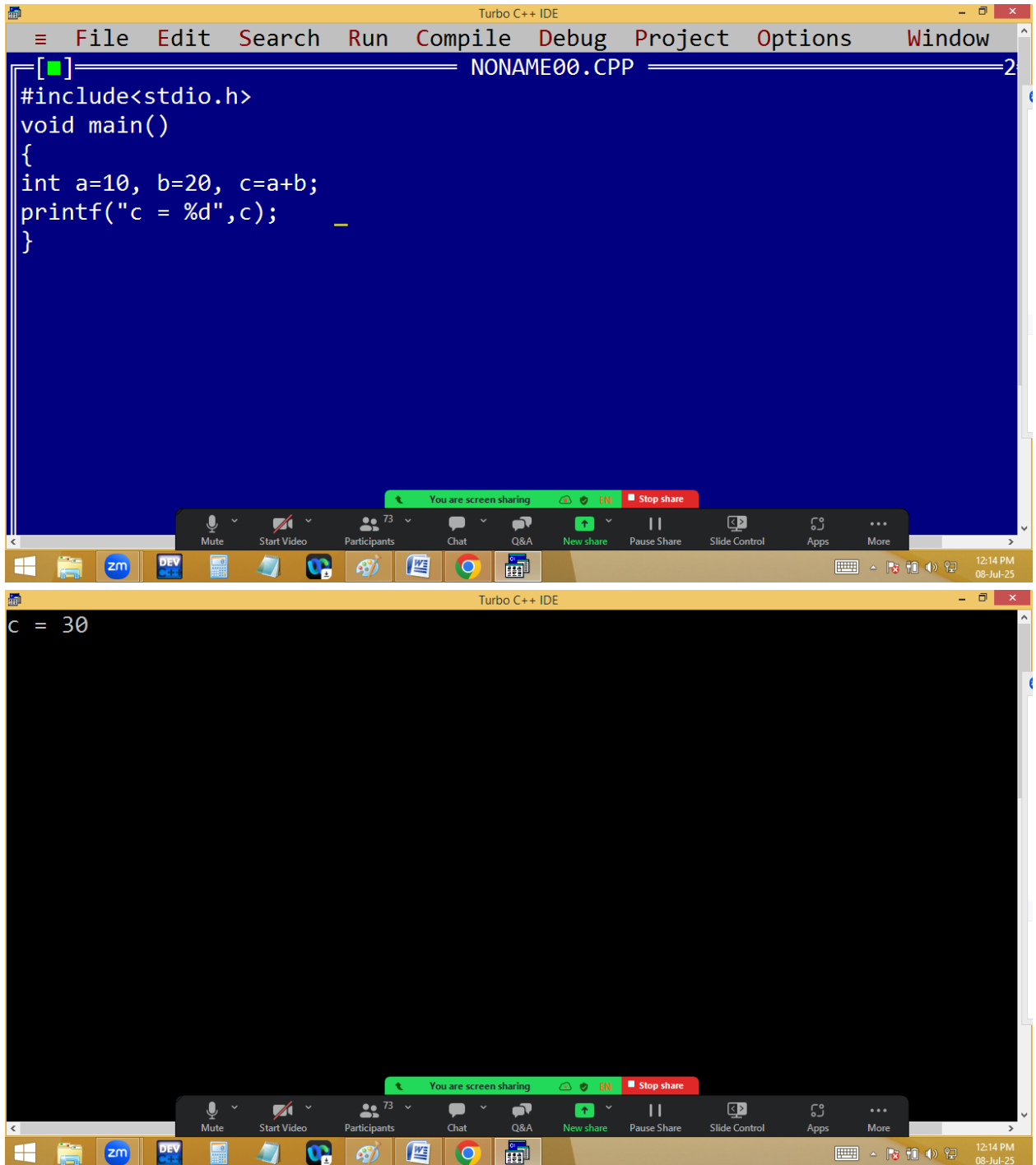
    printf("c = %d",c);
}
```

The code uses the `asm` block to perform assembly-level operations: moving the value of `a` into register `ax`, moving the value of `b` into register `bx`, adding the contents of `ax` and `bx`, and then moving the result into `c`. The `printf` statement outputs the value of `c`.

Below the editor, the output window shows the result of the program execution: `c = 30`. The Windows taskbar at the bottom shows the time as 12:04 PM on 08-Jul-25. A green status bar at the bottom of the IDE window indicates 'You are screen sharing'.

3. High level language: Created with simple English and easy to understand.
Eg: addition, subtraction,...

Example for high level program:



The image consists of two screenshots of the Turbo C++ IDE. The top screenshot shows the source code of a C program in a file named NONAME00.CPP. The code is as follows:

```
#include<stdio.h>
void main()
{
int a=10, b=20, c=a+b;
printf("c = %d",c);
}
```

The bottom screenshot shows the output of the program, which is "c = 30". Both screenshots include a Windows taskbar at the bottom with various application icons and a system clock showing 12:14 PM on 08-Jul-25. A Zoom toolbar is also visible in the center of each screenshot, indicating a screen sharing session.

C is a **high level language** with **low level features**.
Hence it is a **middle level language**.

C low level features are used to design system software.

C high level features used to design application software.

Hence C is a **Multi-Purpose programming language**.

2. C is a compiler based programming language.

What is a translator?

