

INTRODUCTION TO C

C is a

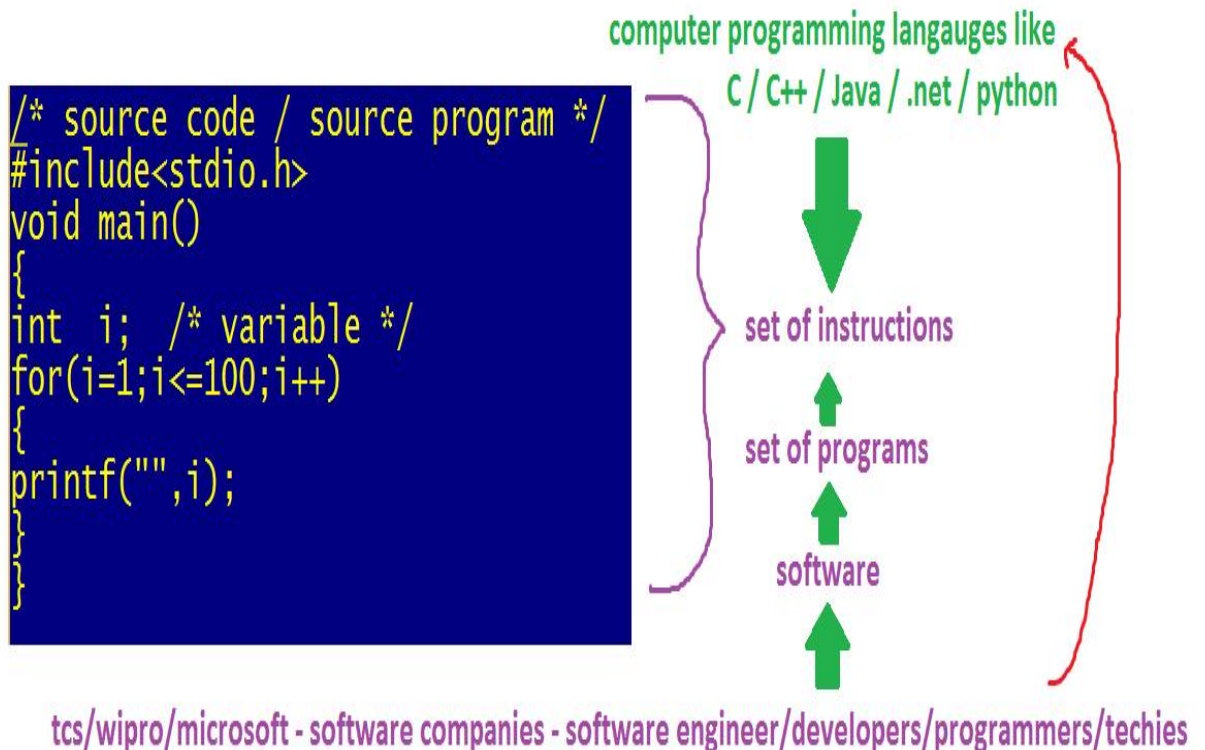
1. It is a high level / middle level programming language.

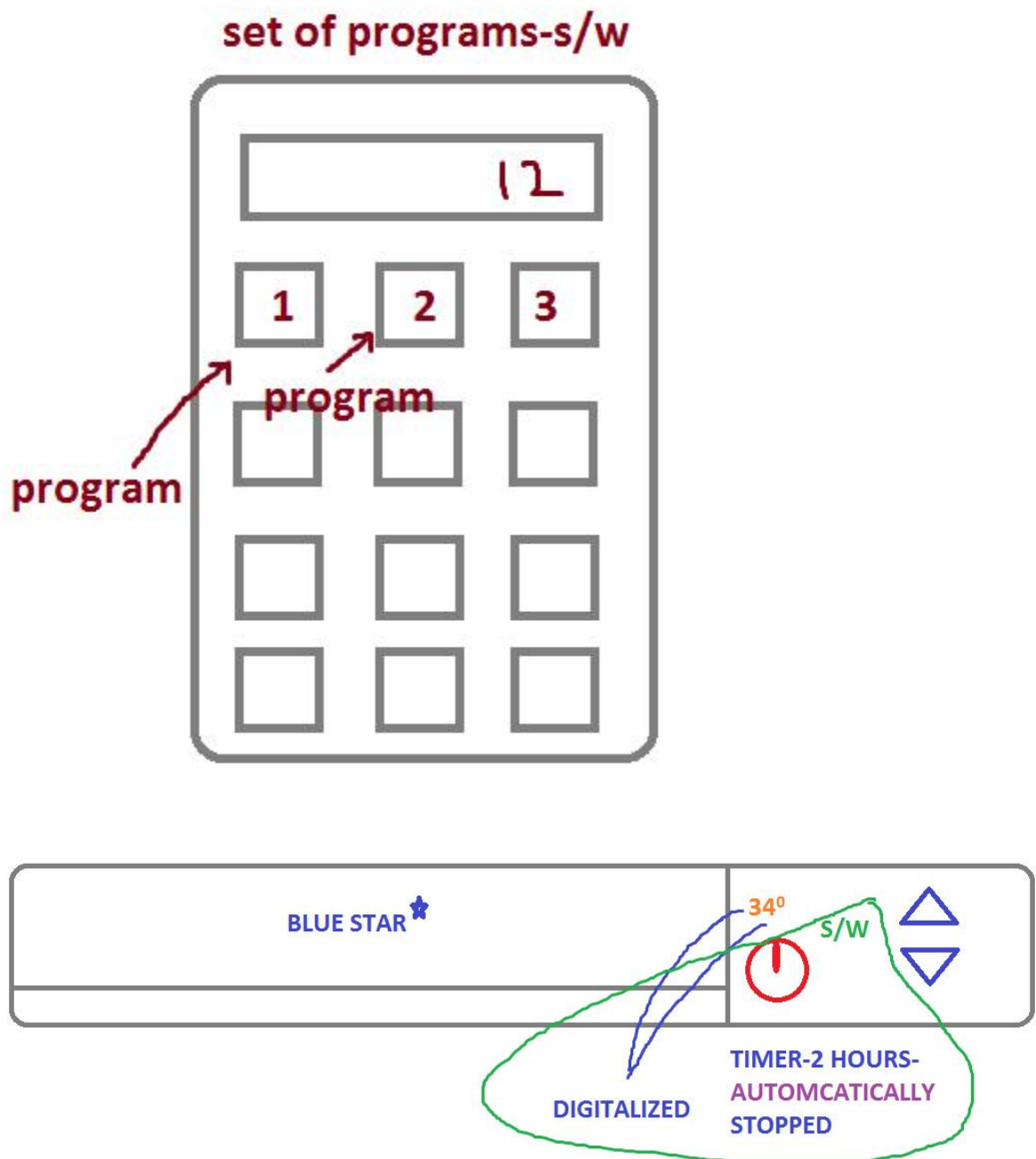
What is a program?

Set of instructions is 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 2 type of software.

1. System software

Eg: o.s, device drivers, translators

2. Application software

Eg: phonepe, irctc, whatsapp,instagram,...

What is a language?

Generally the languages like telugu / English / Marathi / hindi etc are used to communicate with humans. Hence they are called human languages / regional languages. By using these human languages we can't communicate with the machines. Hence we are using the computer programming languages like C / C++ / Java / .net / pythos etc. By using these languages we are creating the **software** [programs] to communicate.

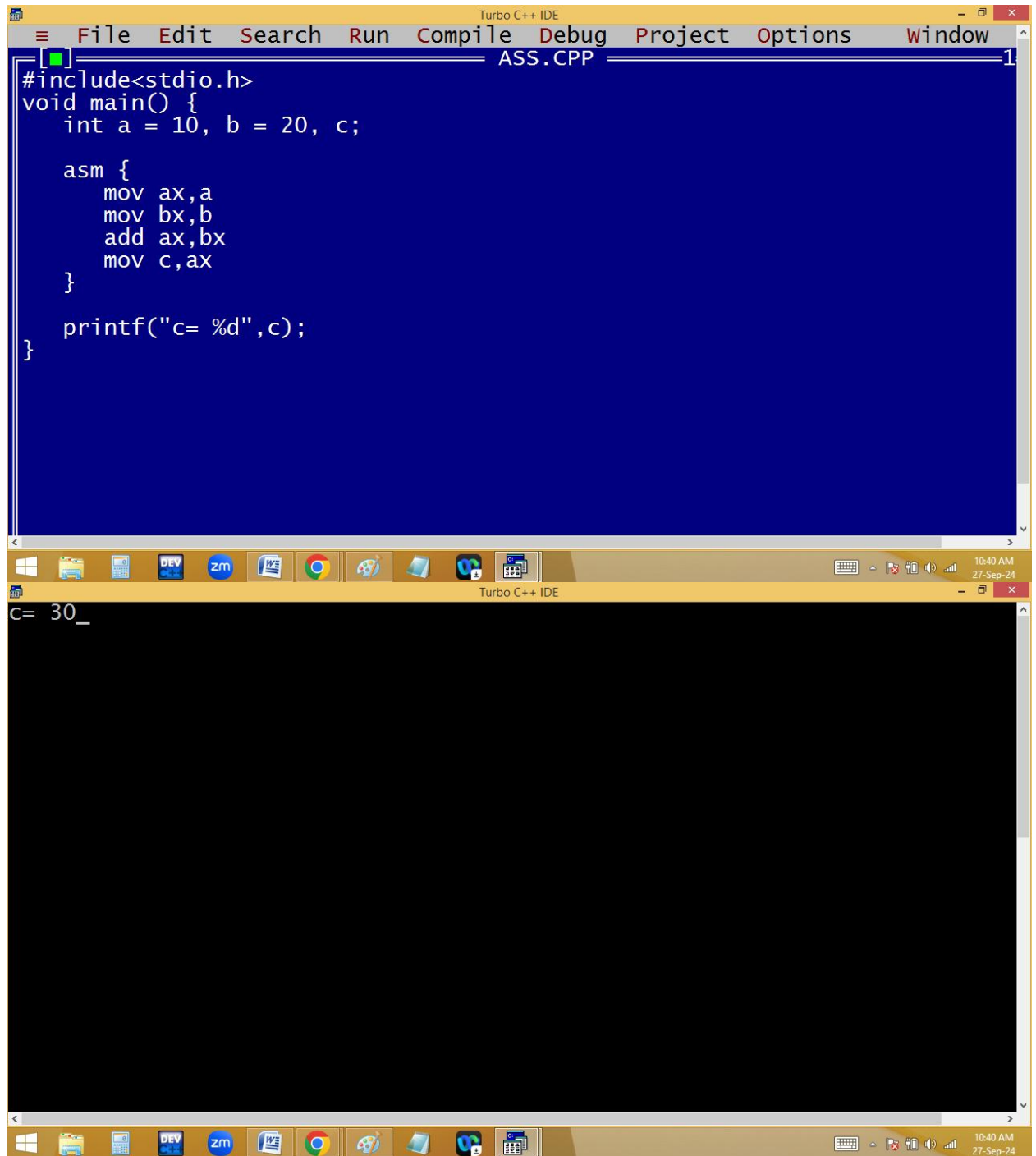
Basically the languages are divided into 3 types.

1. **Machine language**: Created with **binary code** [0,1] and very difficult to understand.

Eg: 1000111

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

Eg: gd mrg, plz, sub,.....



The image shows a screenshot of the Turbo C++ IDE. The top window, titled 'ASS.CPP', contains the following C code:

```
#include<stdio.h>
void main() {
    int a = 10, b = 20, c;

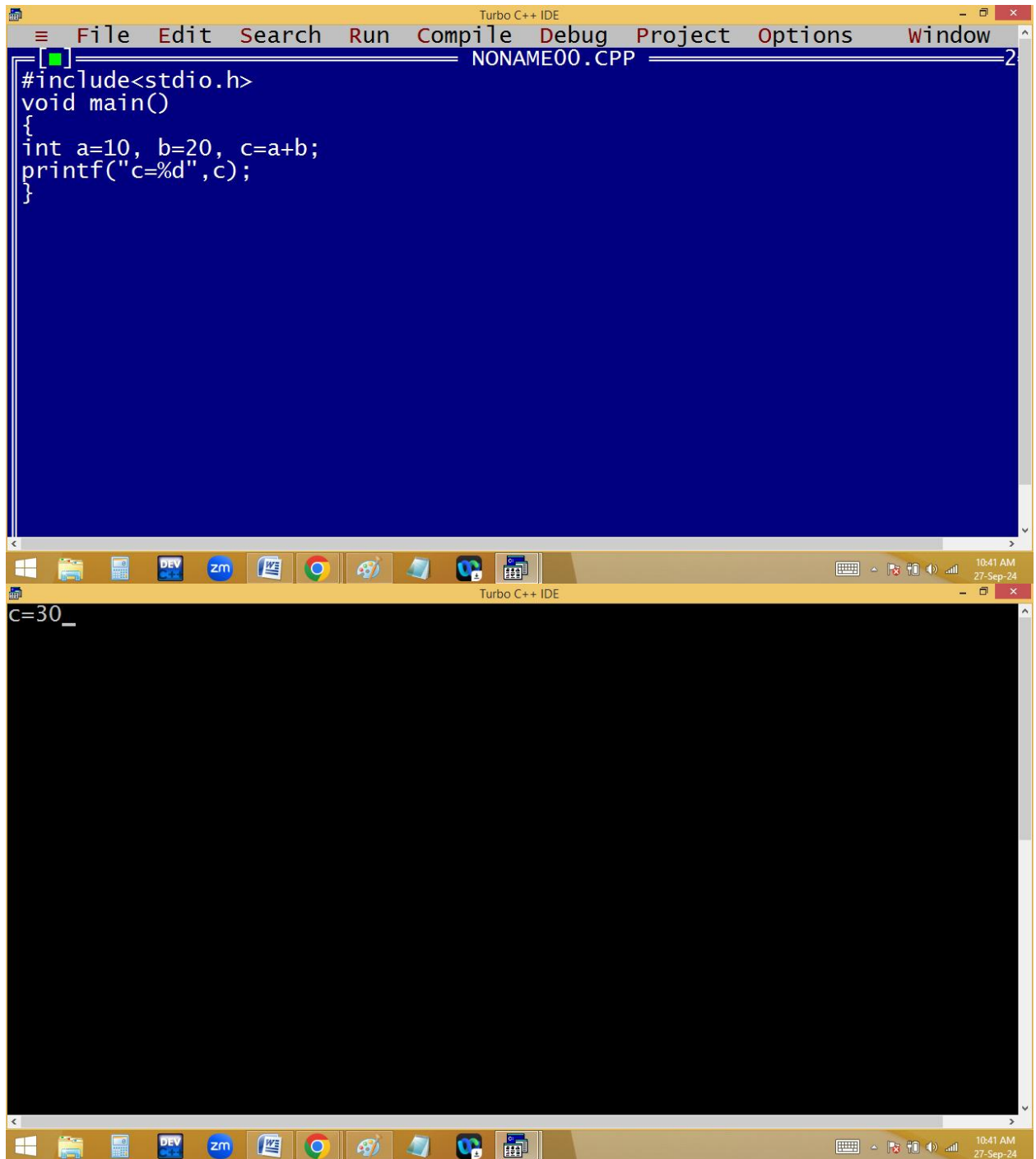
    asm {
        mov ax,a
        mov bx,b
        add ax,bx
        mov c,ax
    }

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

The bottom window shows the output of the program: 'c= 30_'. The Windows taskbar at the bottom includes icons for File Explorer, DEV, zm, Word, Chrome, and other applications. The system clock in the bottom right corner indicates 10:40 AM on 27-Sep-24.

3. High level language: Created with **simple English** and easy to understand.

Eg: good morning, please, subject,....



The image shows two windows of the Turbo C++ IDE. The top window, titled 'NONAME00.CPP', contains the following C code:

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

The bottom window, titled 'Turbo C++ IDE', shows the output of the program: 'c=30_'. The Windows taskbar at the bottom indicates the time is 10:41 AM on 27-Sep-24.

C comes with both **low level and high level features**. Hence it is a middle level language. Because of both features using c we can develop **system software and**

application software. Hence **c** is a **multi-purpose** programming language.