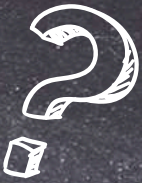
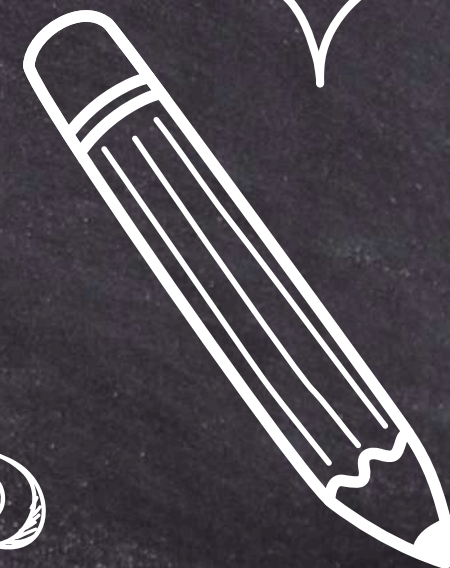
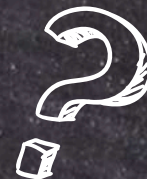


OBJECT ORIENTED PROGRAMMING

GRUOP # 5

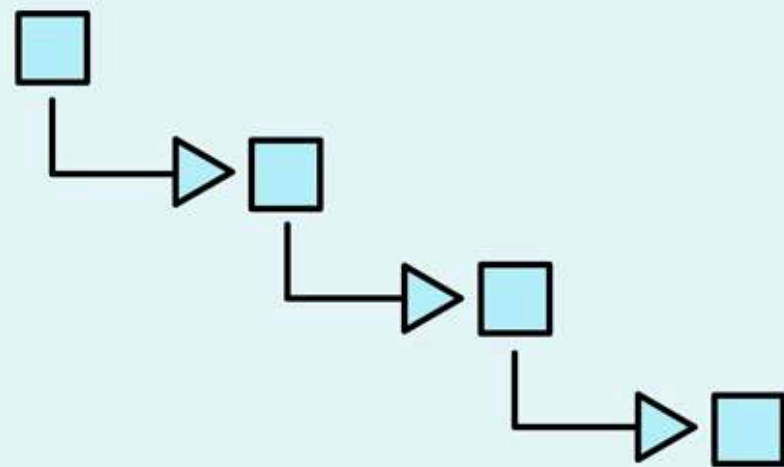
GROUP MEMBERS

MORALES ESTEBAN
NAVARRO ISRAEL
CHILQUINGA LUIS
BARBA JEREMY



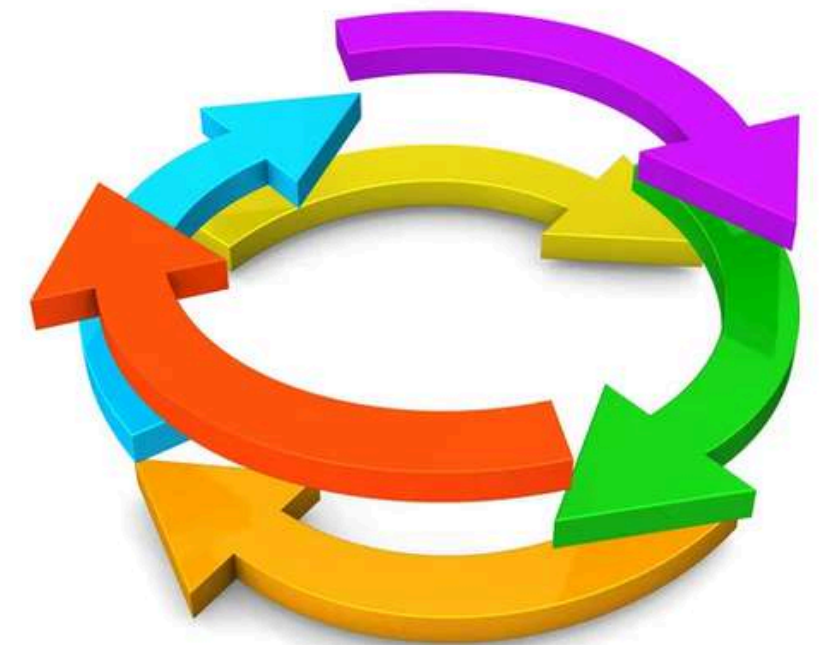
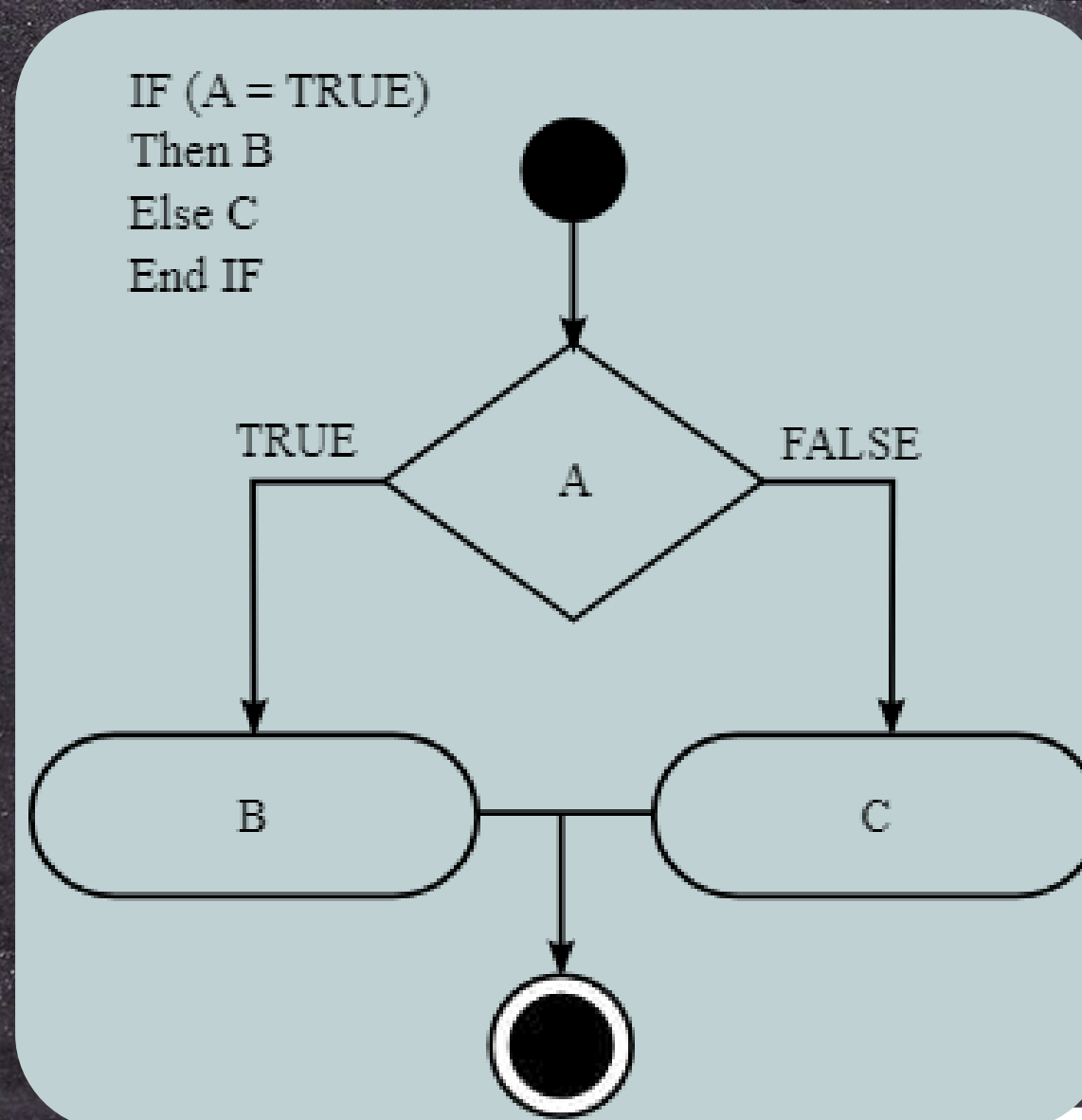
GENERAL PROGRAM STRUCTURE ALGORITHM

Sequence



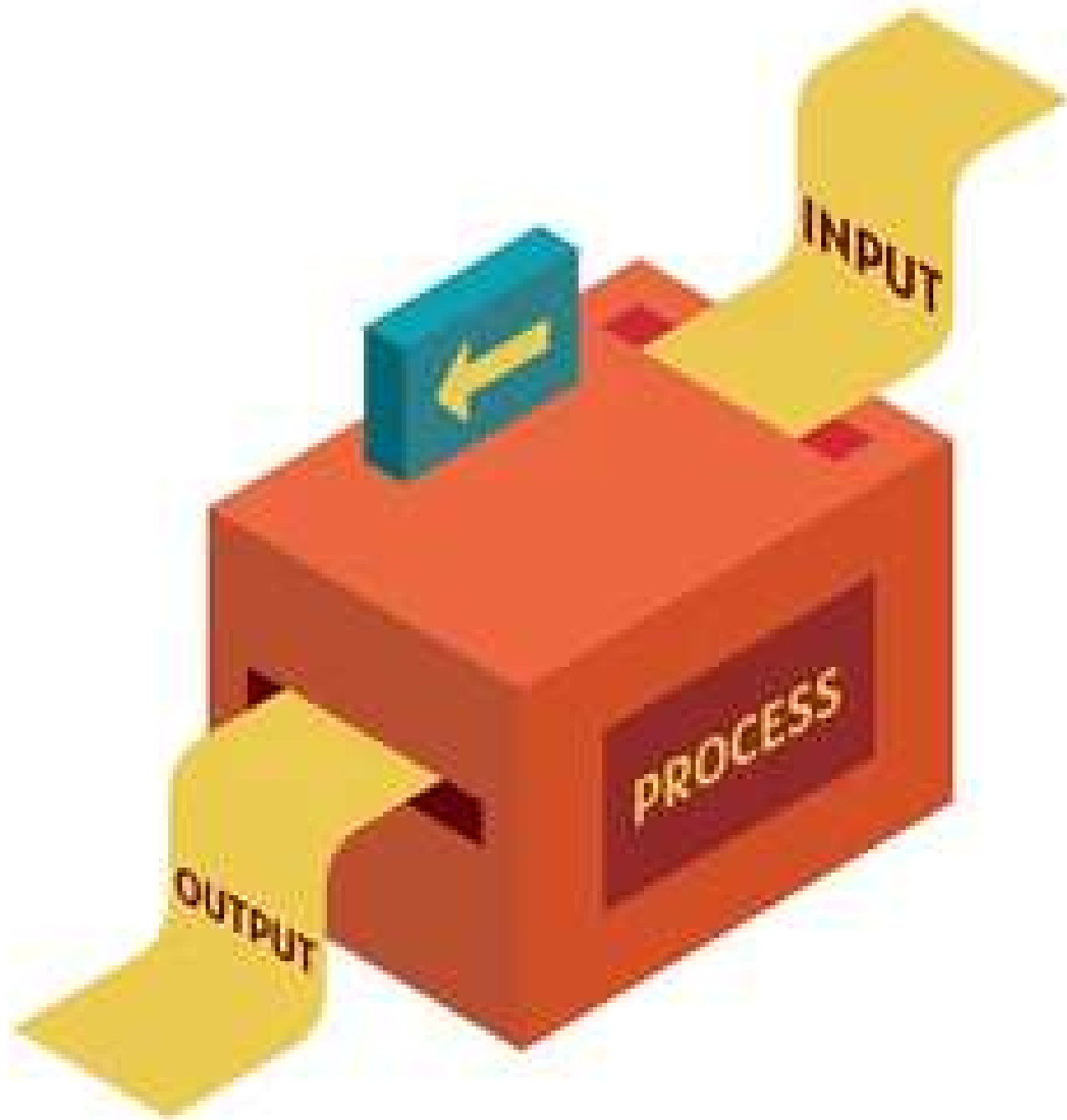
SEQUENCES

CONDITIONALS



CYCLES

FEATURES



HEADER: COMMENTS

FUNCTIONS

DECLASSIFICATIONS: DATA TYPES

INPUTS.

CONTROL: REPETITIONS

OUTPUTS.

Installation of a program

IN A PROGRAM DEPENDS ON THE TYPE OF SOFTWARE AND THE OPERATING SYSTEM:

1. DESKTOP PROGRAMS

- **EXECUTABLE INSTALLERS:** PROGRAMS FOR WINDOWS OR MACOS ARE USUALLY DISTRIBUTED IN EXECUTABLE FORMATS (SUCH AS .EXE OR .DMG) WITH AN INSTALLATION WIZARD.



- **PACKAGE SYSTEMS:** IN LINUX SYSTEMS, SOFTWARE CAN BE INSTALLED USING A PACKAGE MANAGER.

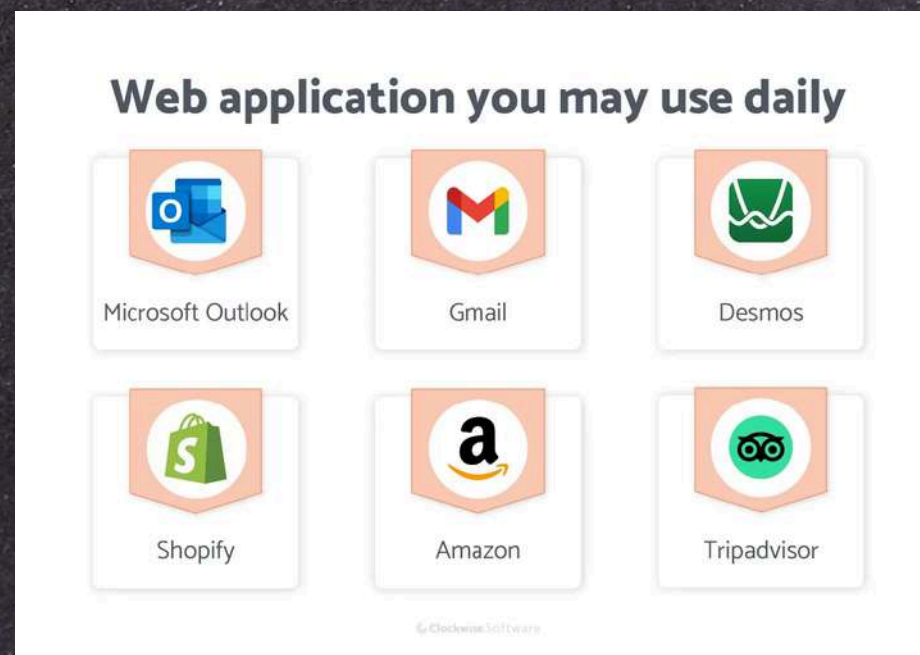
```
wikihowsteve@ubuntu:~$ sudo apt-get update
[sudo] password for wikihowsteve:
Get:1 http://security.ubuntu.com/ubuntu disco-security InRelease [97.5 kB]
Hit:2 http://ppa.launchpad.net/linuxuprising/java/ubuntu disco InRelease
Hit:3 http://us.archive.ubuntu.com/ubuntu disco InRelease
Get:4 http://us.archive.ubuntu.com/ubuntu disco-updates InRelease [97.5 kB]
Hit:5 http://ppa.launchpad.net/webupd8team/java/ubuntu disco InRelease
Get:6 http://us.archive.ubuntu.com/ubuntu disco-backports InRelease [88 kB]
Get:7 http://us.archive.ubuntu.com/ubuntu disco-updates/main amd64 Packages [258 kB]
Get:8 http://us.archive.ubuntu.com/ubuntu disco-updates/main i386 Packages [255 kB]
Get:9 http://us.archive.ubuntu.com/ubuntu disco-updates/universe i386 Packages [255 kB]
Get:10 http://us.archive.ubuntu.com/ubuntu disco-updates/universe amd64 Packages [258 kB]
Fetched 1,221 kB in 22s (56.3 kB/s)
Reading package lists...
wikihowsteve@ubuntu:~$ sudo apt-get upgrade
```

```
# yum whatprovides libgimpui-2.0.so.0
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: mirror.ufscar.br
* epel: mirror.globo.com
* extras: mirror.ufscar.br
* updates: mirror.ufscar.br
2:gimp-libs-2.8.22-1.el7.i686 : GIMP libraries
Repo           : base
Matched from:
Provides       : libgimpui-2.0.so.0

# >
```

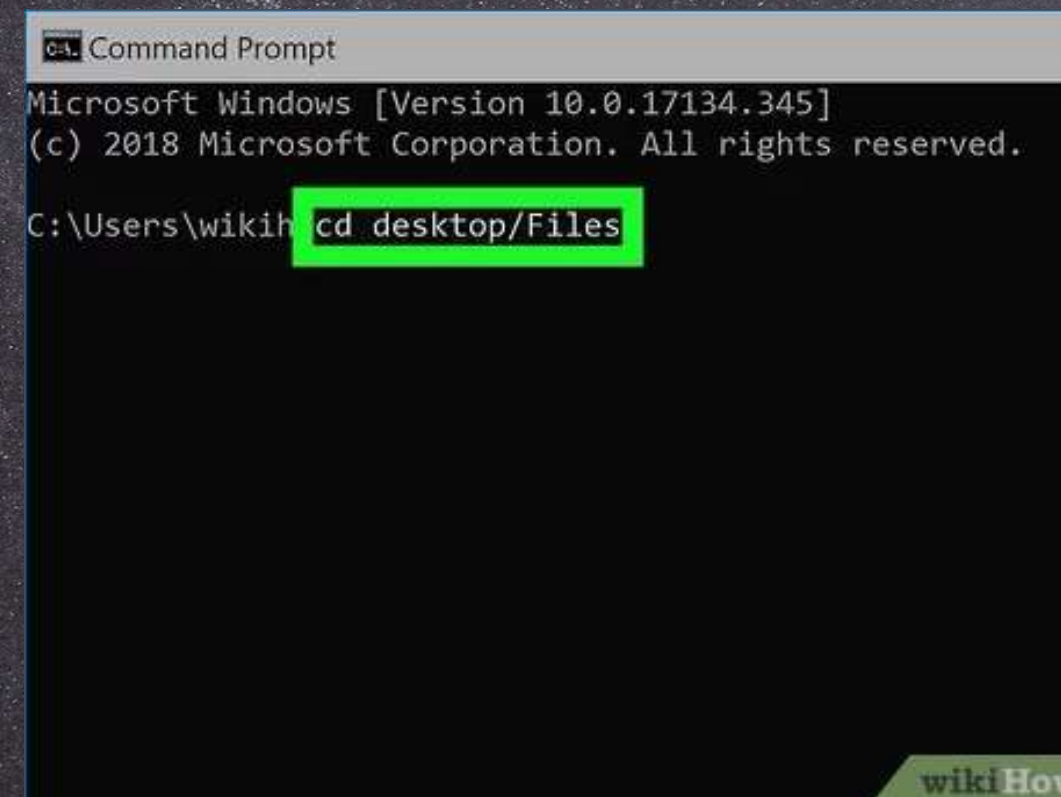
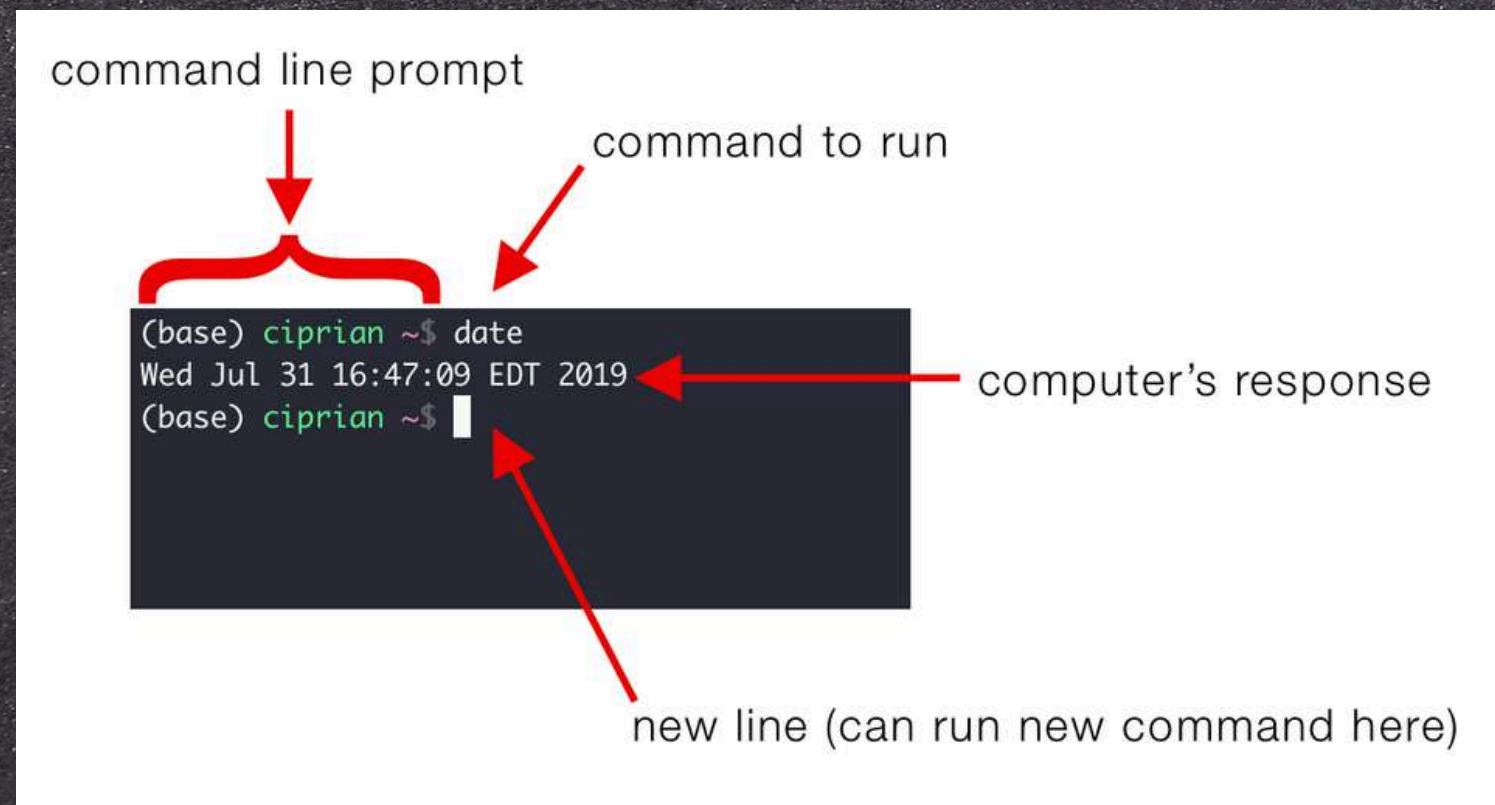
2. WEB-BASED PROGRAMS

- FOR WEB APPLICATIONS, YOU GENERALLY ONLY NEED A BROWSER AND INTERNET ACCESS.
- INSTALLATION MAY INCLUDE LOCAL CONFIGURATIONS, SUCH AS INSTALLING EXTENSIONS OR ENABLING BROWSER PERMISSIONS.

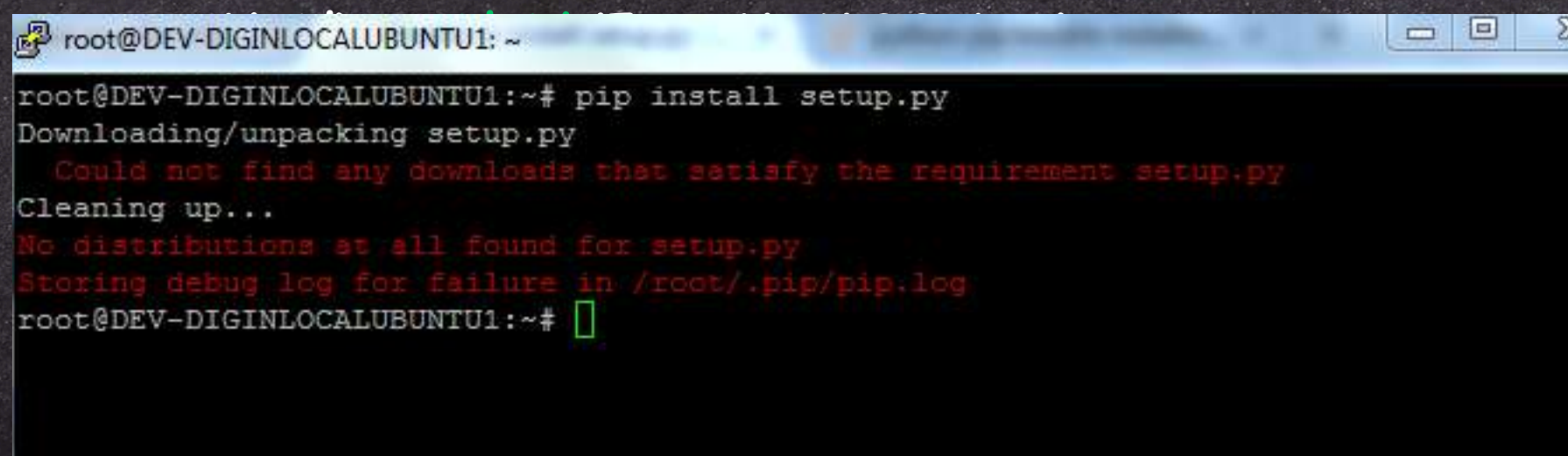


3. COMMAND LINE PROGRAMS OR SCRIPTS

- IN THESE CASES, THE PROGRAM IS TYPICALLY A SCRIPT FILE(.PY, .SH) ,AND, IN SOME CASES, ADMINISTRATOR PERMISSIONS ARE REQUIRED TO RUN AND INSTALL DEPENDENCIES.

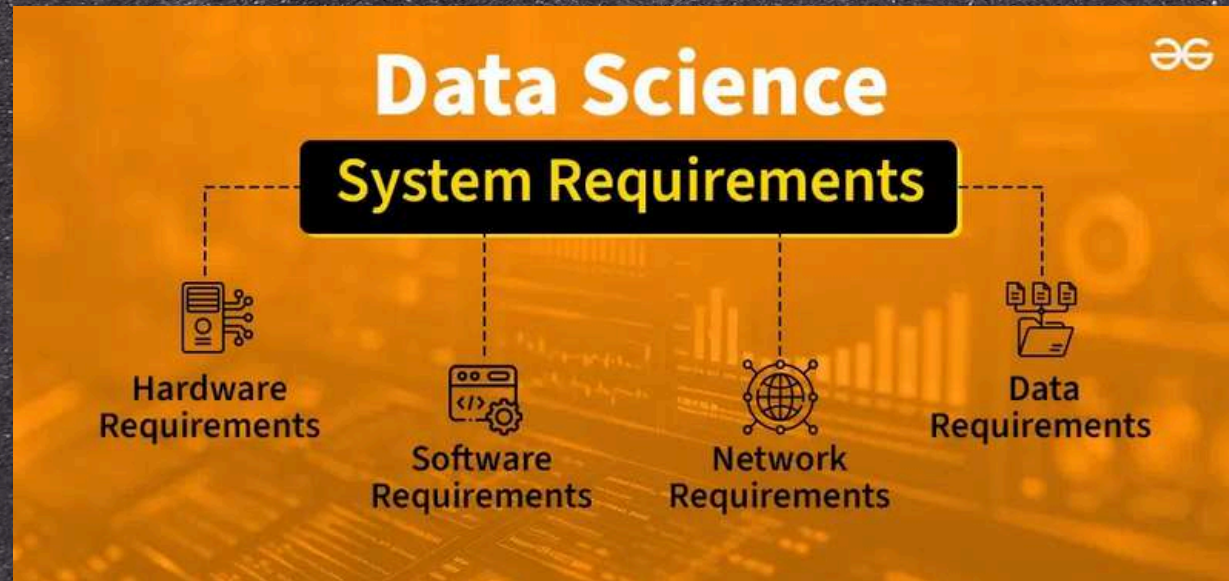


- THE INSTALLER CAN BE A SETUP.PY FILE OR A PACKAGE MANAGEMENT TOOL LIKE PIP (FOR

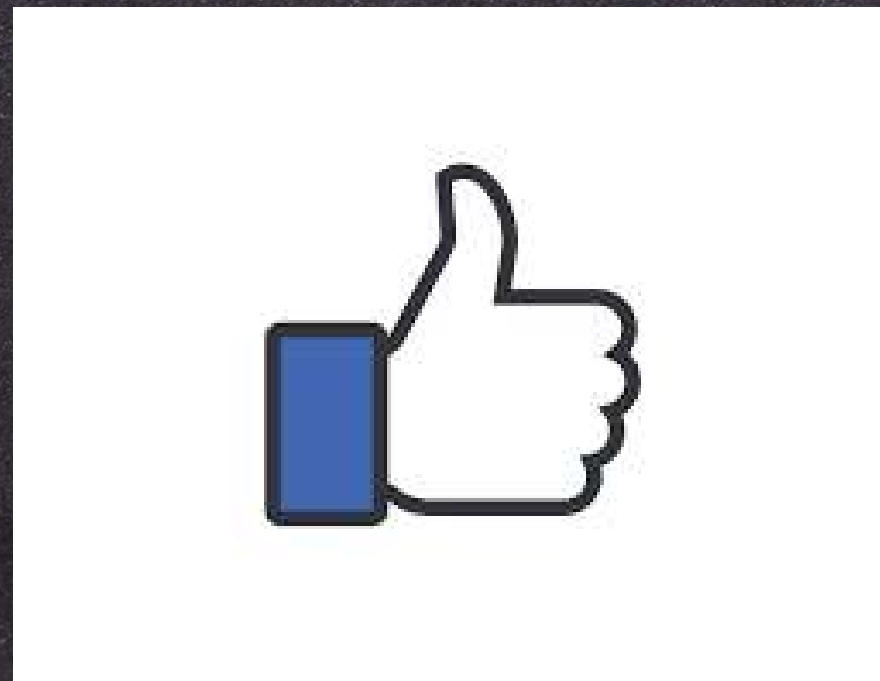


4. PREREQUISITES.

- SOME PROGRAMS NEED PREREQUISITES (SUCH AS AN INSTALLED PROGRAMMING LANGUAGE OR A SPECIFIC ENVIRONMENT) BEFORE INSTALLATION. THIS IS COMMON IN DEVELOPMENT ENVIRONMENTS OR SYSTEMS WITH SPECIFIC DEPENDENCIES.



- THE INSTALLATION PROCESS OF A PROGRAM ARE FUNDAMENTAL TO ITS FUNCTIONALITY AND OPTIMAL USE.



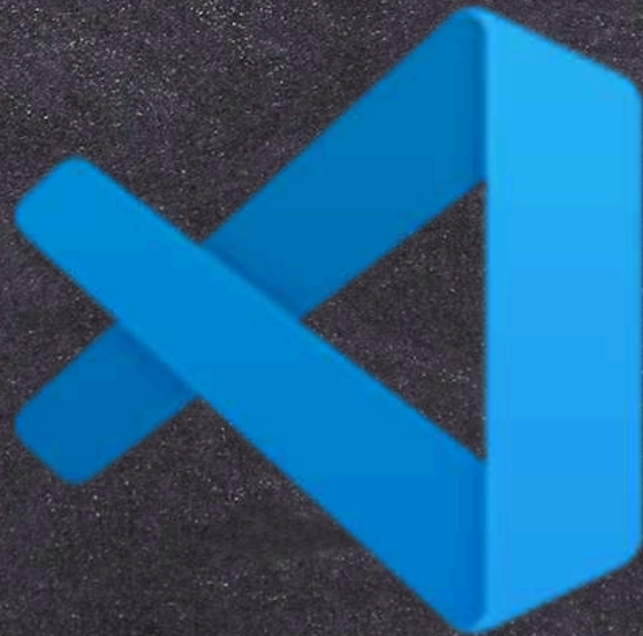
Administration and configuration of work areas

The administration and configuration of our IDE has to be organized with appropriate tools for better efficiency in the creation of our programs. To achieve this suitable environment, we can configure and add features to our work environment.



Administration and configuration of work areas

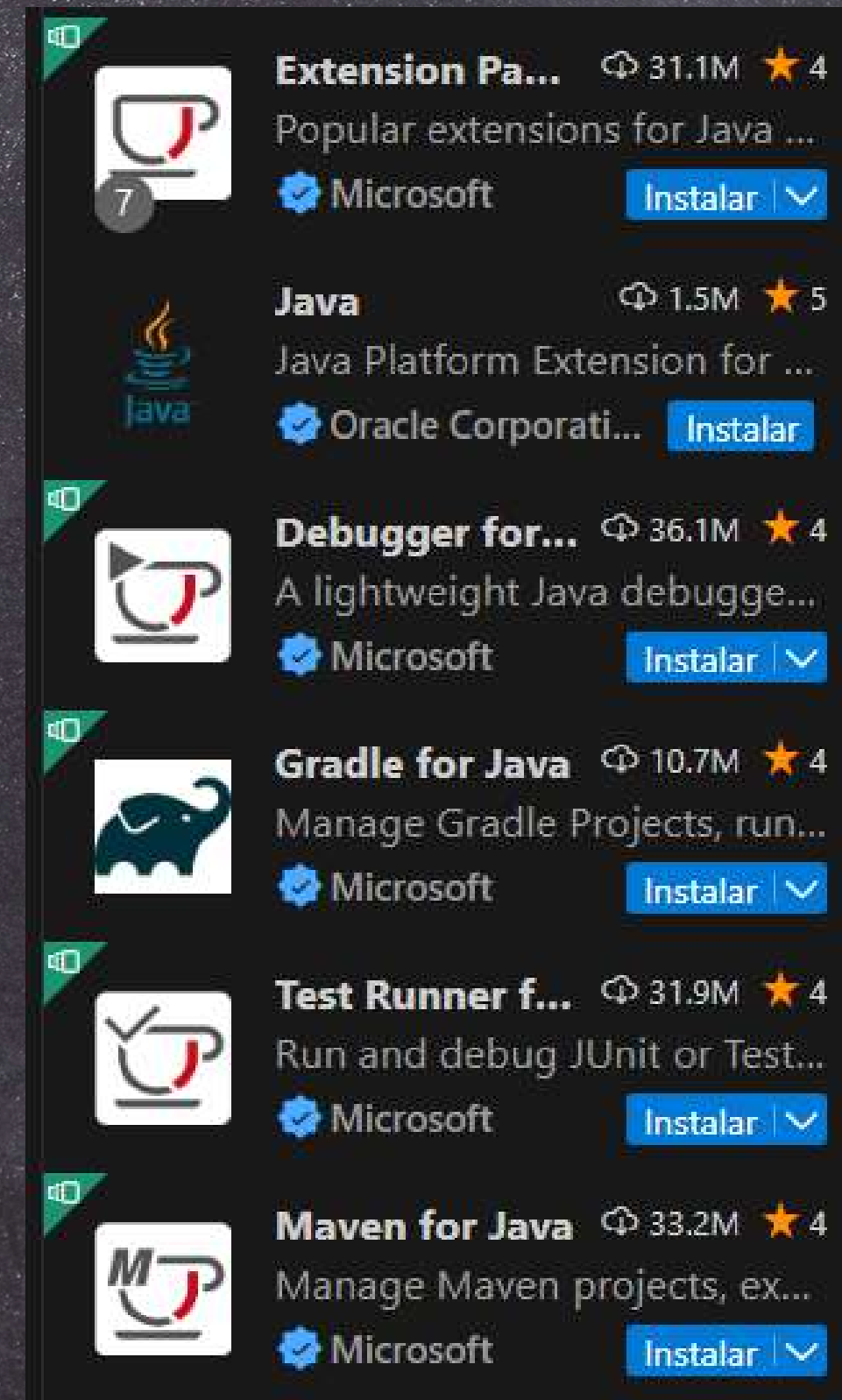
Seleccionar un IDE: We must select a suitable IDE for the development of our codes, this has to be compatible with the programming language we will use.



Visual Studio Code

Administration and configuration of work areas

Plugins and extensions: Downloading tools such as plugins and extensions will provide us with useful tools such as compilers, code wizards among others.



Administration and configuration of work areas

Customization: Entering the visual aspect of the IDE we can find various customization functionalities, such as the color of the workspace, the scale, color and font of the font and characters.

```
1 public class TiposDeDatos {
2
3     Run | Debug
4     public static void main(String[] args) {
5         // Tipos primitivos
6         // Tipo byte: Almacena enteros pequeños
7         byte b = 100; // Valor entre -128 y 127
8         System.out.println("Valor de byte: " + b);
9
10        // Tipo short: Almacena enteros medianos
11        short s = 32000; // Valor entre -32,768 y 32,767
12        System.out.println("Valor de short: " + s);
13    }
```


Command lines

A command-line interface is a software mechanism used to interact with the operating system via the keyboard.

Another available mechanism is the graphical user interface, which is widely used today in all applications and software systems.

```
1
2 package clasel;
3
4 public class Animales {
5     public String Tipodeanimal;
6     public String Nombre;
7
8     public Animales(String Tipodeanimal, String Nombre){
9         this.Tipodeanimal = Tipodeanimal;
10        this.Nombre = Nombre;
11    }
12
13    public void informacion(){
14        System.out.println("El tipo de animal es: "+Tipodeanimal+" y el nombre es: "+Nombre);
15    }
16 }
```

```
public class Clase1 {
    public static void main(String[] args) {
        Persona Personal = new Persona("Freud",18);
        Personal.informacion();

        Persona Persona2 = new Persona("Jonathan",19);
        Persona2.informacion();

        Persona Persona3 = new Persona("Jeremy",20);
        Persona3.informacion();

        Car Carl = new Car("Renaul","Azul", 2005);
        Carl.informacion();

        Car Car2 = new Car("Chevrolet","Negro",1980);
        Car2.informacion();

        Car Car3 = new Car("Masda","Blanco",2000);
        Car3.informacion();

        Animales Animales1 = new Animales("Perro","Kifa");
        Animales1.informacion();

        Animales Animales2 = new Animales("Gato","Pelusa");
        Animales2.informacion();

        Animales Animales3 = new Animales("Leon","Kira");
        Animales3.informacion();
    }
}
```


Bibliographical references

GCF Aprende Libre. (2019, 4 febrero). Estructuras de programación (qué es secuencia, condicional, ciclo) | Computación y programación [Vídeo]. YouTube.
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Martínez, M. F. o. A. (s. f.-b). ¿Cuál es la estructura de un programa informático?
<https://fernandoarciniega.com/cual-es-la-estructura-de-un-programa-informatico/>

Herrera, P. (2020, Agosto). Introducción a la Programación.
<https://www.uv.mx/personal/pmartinez/files/2021/03/Libro-completo-Introduccion-a-la-programacion.pdf>