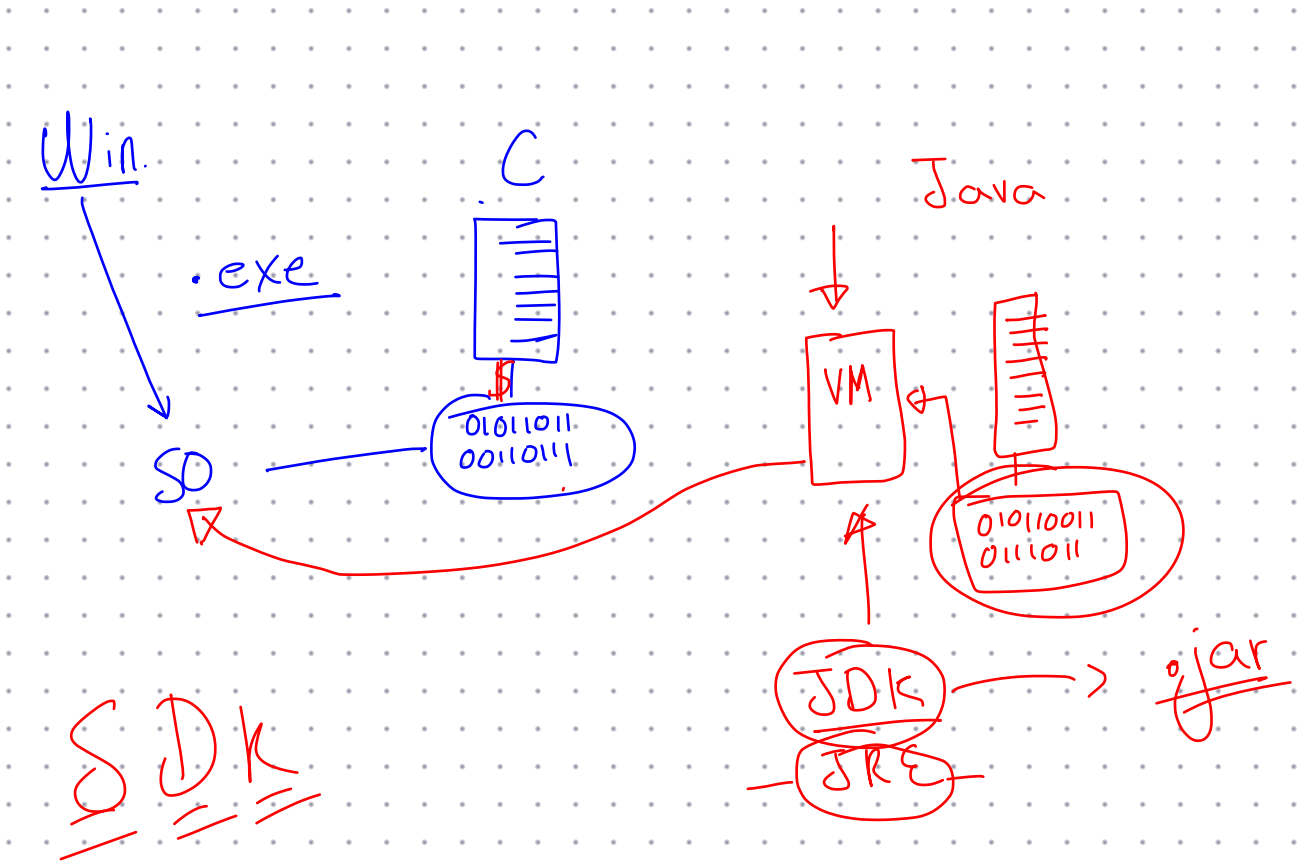
Curso de Java intermedio - Programación orientada a objetos

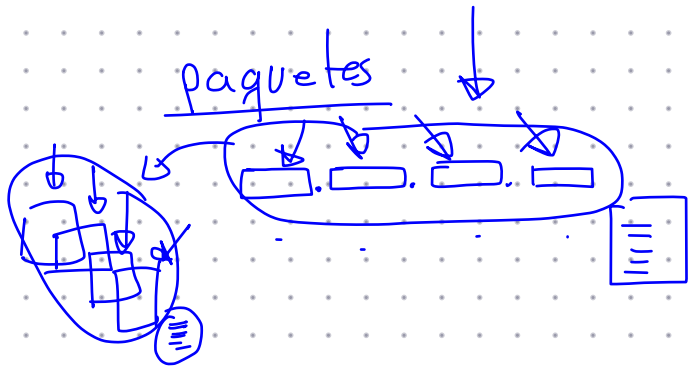
Java™
ORACLE

Fundación Universitaria
Comfenalco Santander


Win
.exe
C
01011011
00110111
SO
Java
VM
01011011
00111011
JDK
JRE
.jar
SDK

JDK — [JRE]

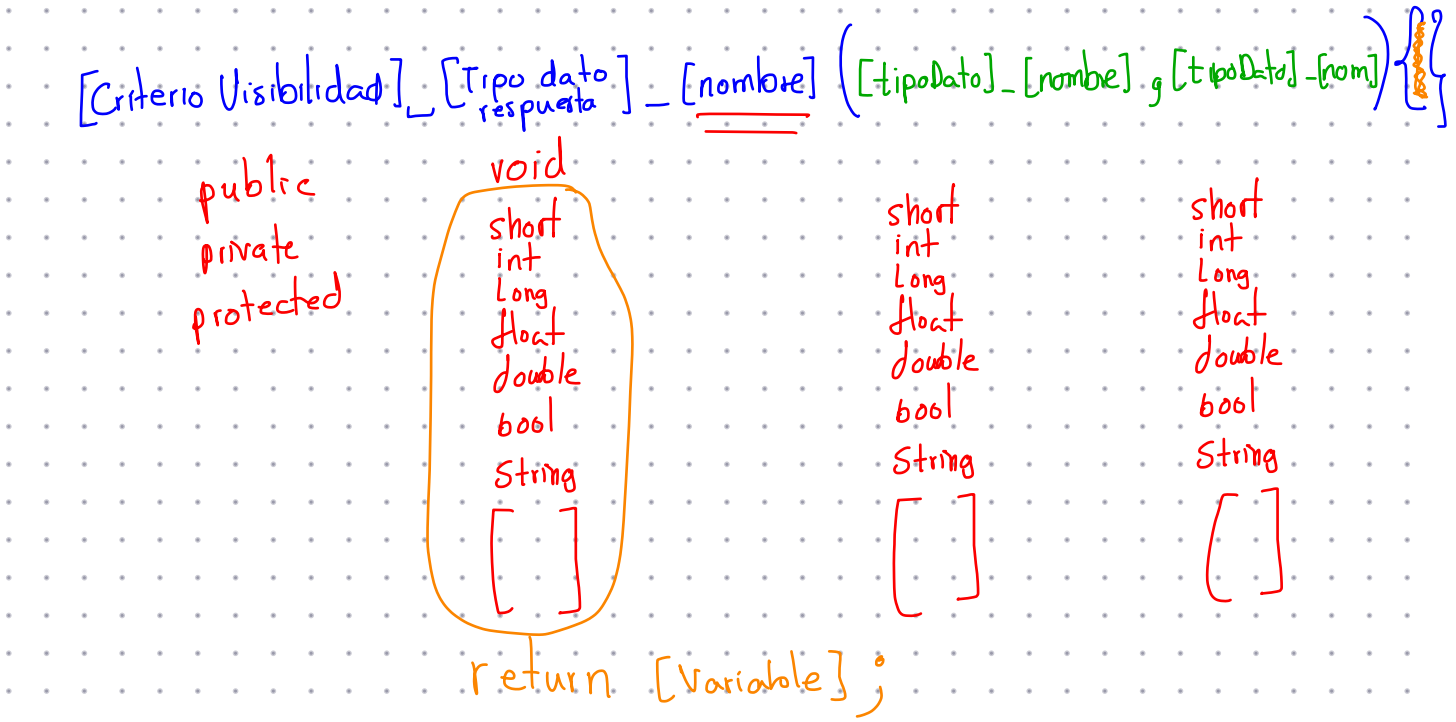
Eclipse IDE



Unidad Basica

Clase

class

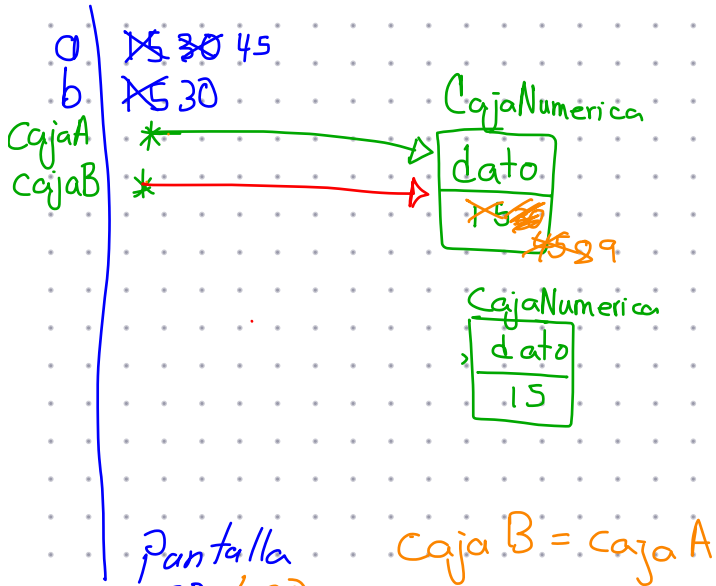

[Criterio Visibilidad] _ [Tipo dato respuesta] _ [nombre] ([tipoDato] _ [nombre] , [tipoDato] _ [nom]) {{{
public
private
protected
void
short
int
Long
float
double
bool
String
[ ]
short
int
Long
float
double
bool
String
[ ]
short
int
Long
float
double
bool
String
[ ]
return [variable] ;

```
public int sumar(int a, int b){
    int suma = a+b;
    return suma;
}

public void imprimirTabla(int numeroParaTabla) {

}
public void imprimirTodasTablas(){

}
```



Pantalla

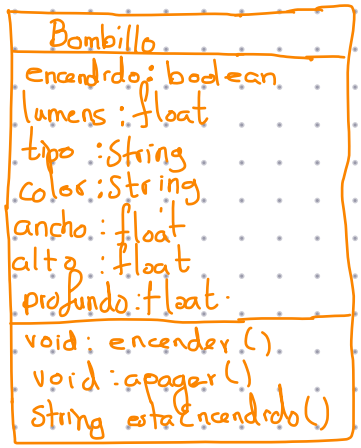
30
15
45
30

30
15
45
45
89
89

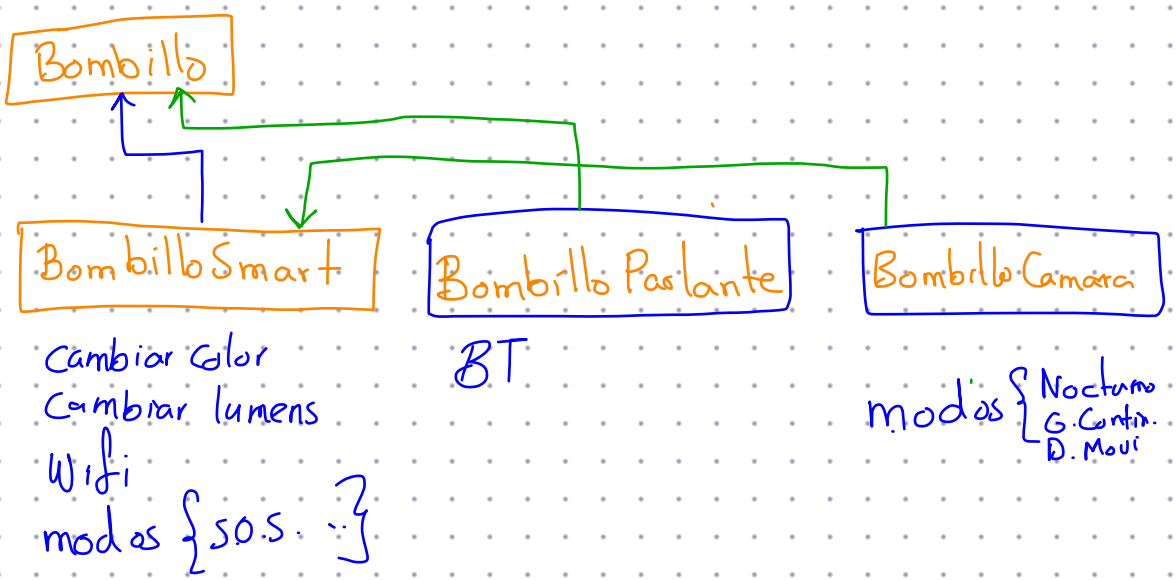
cajaB = cajaA

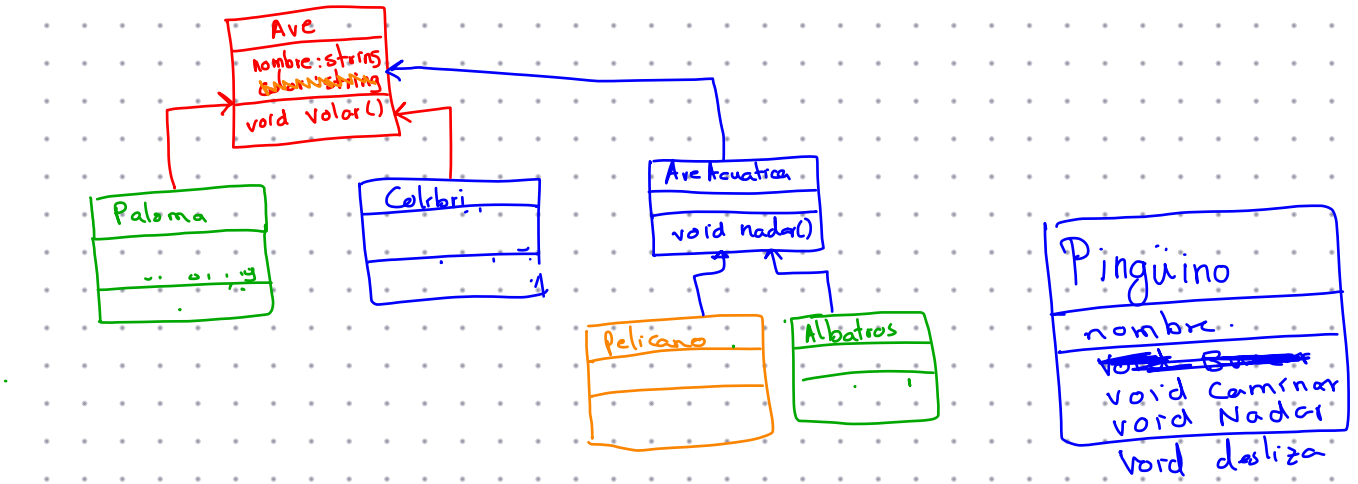
cajaB = *

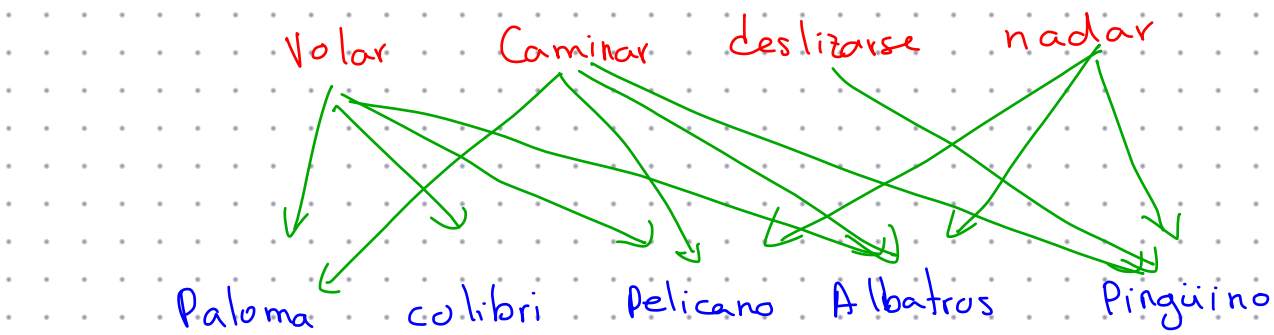
UML



proyecto Herencia

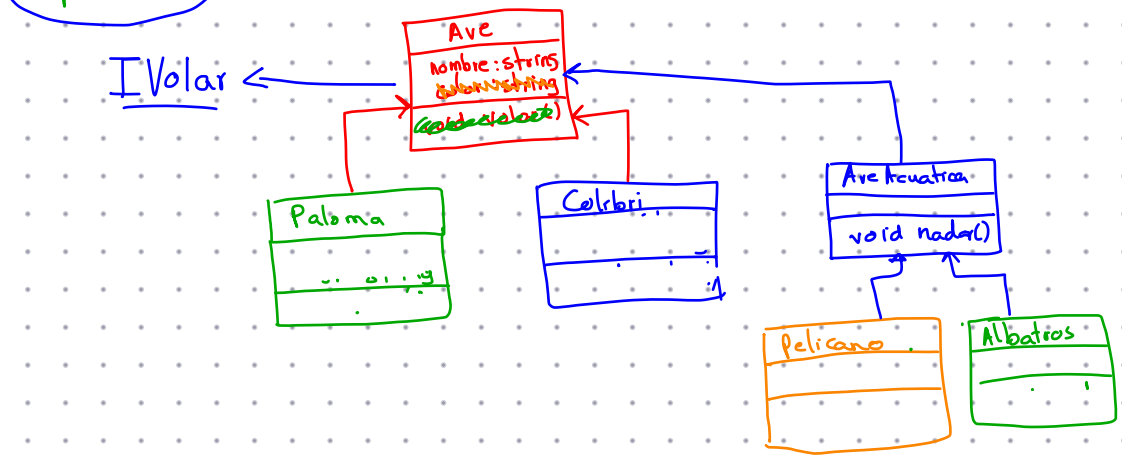

Bombillo
BombilloSmart
BombilloParlante
BombilloCamara
Cambiar Color
Cambiar lumens
Wifi
modos { SOS. .. }
BT
modos { Nocturno
G. Contin.
D. Movi

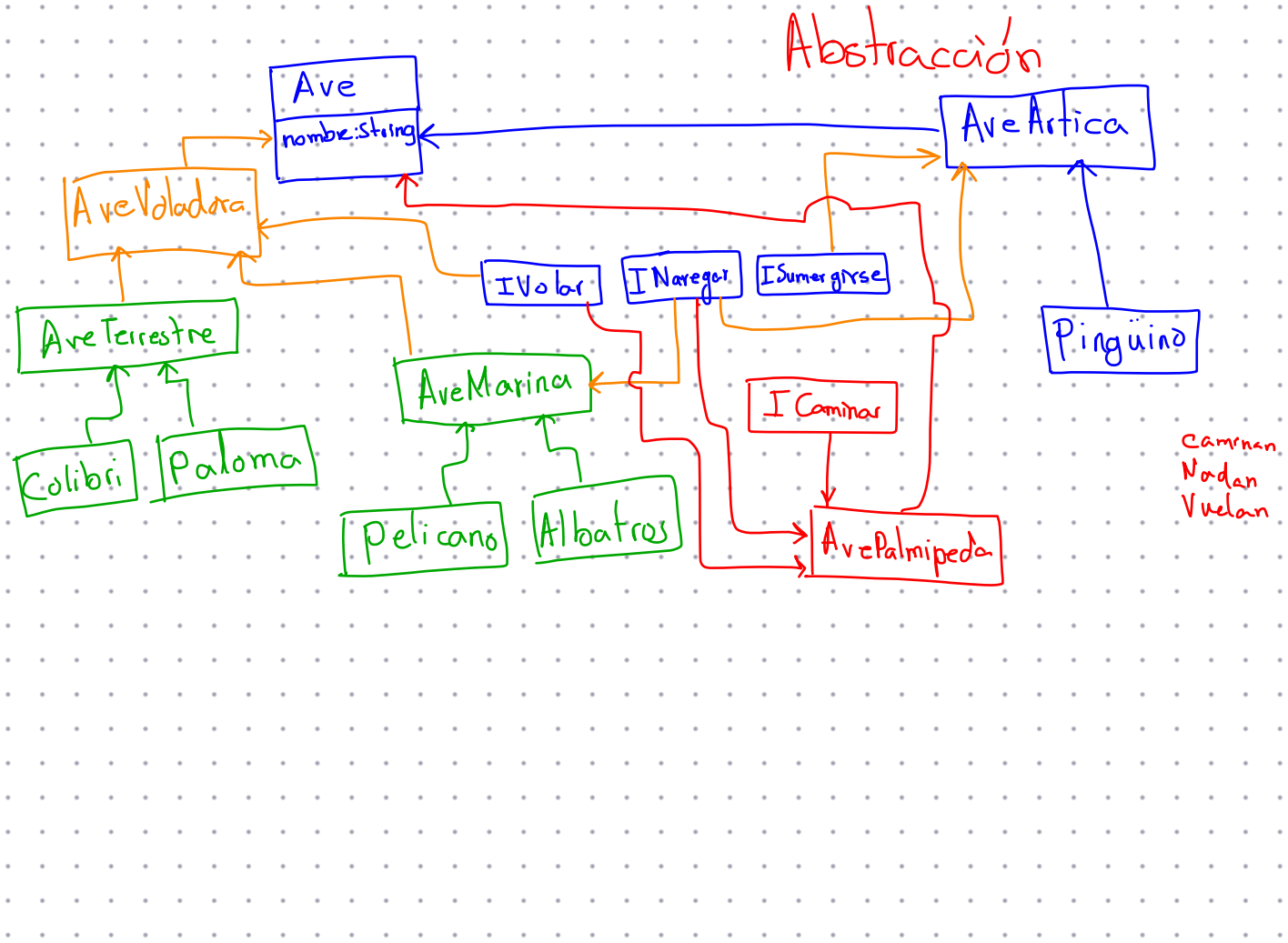

Ave
nombre:string
void volar()
Paloma
Colibri
AveAcuatica
void nadar()
Pelicano
Albatros
Pinguino
nombre
void caminar
void Nadar
void desliza


Volar
Caminar
deslizarse
nadar
Paloma
colibri
Pelicano
Albatros
Pingüino

Interfaz

ComportamientoVolar



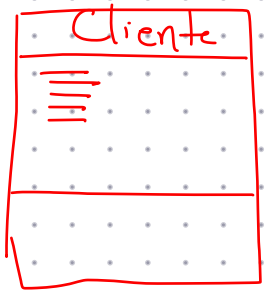

Abstracción
Ave
nombre:string
AveVoladora
AveTerrestre
Colibri
Paloma
AveMarina
Pelicano
Albatros
IVolar
INavegar
ISumergirse
ICaminar
AveArtica
Pinguino
AvePalmipeda
Caminan
Nadan
Vuelan

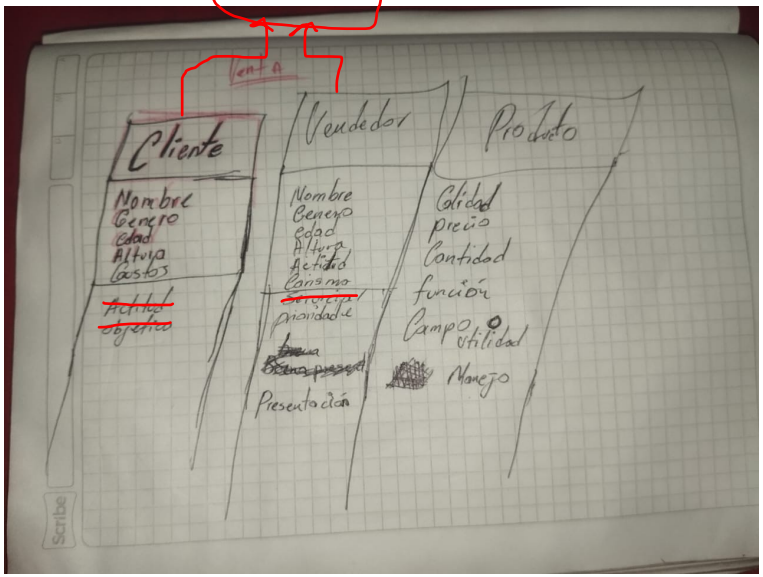
Venta

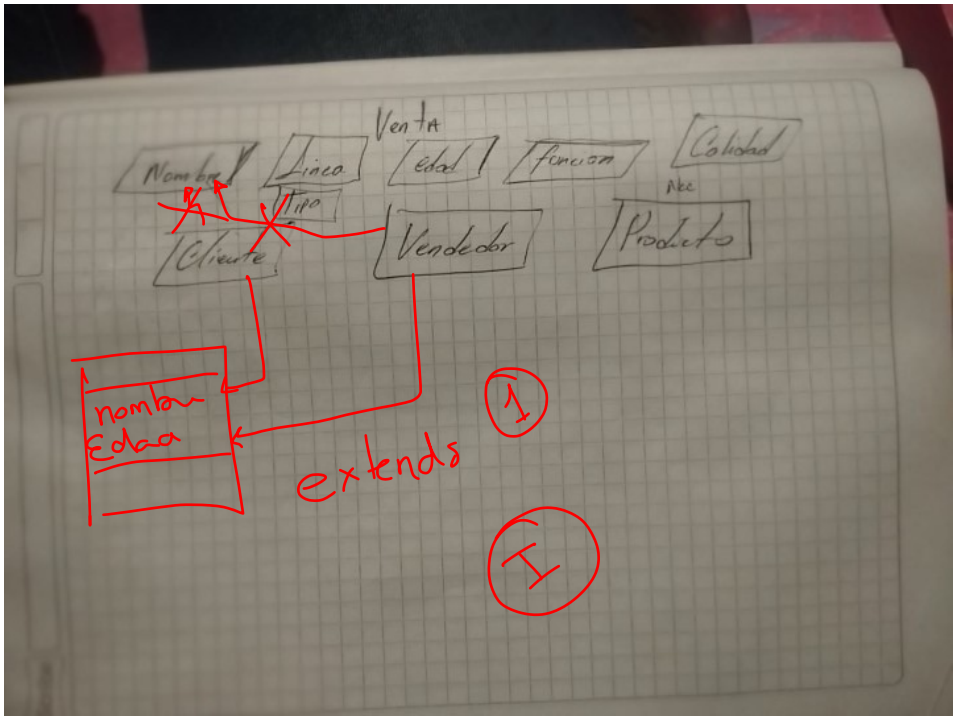
Cliente

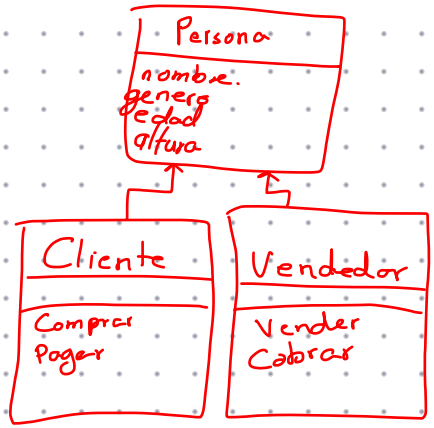
Producto

Vendedor




Venta
Cliente
Nombre
Genero
Edad
Altura
Gustos
Actitud
objetivo
Vendedor
Nombre
Genero
edad
Altura
Actitud
Carisma
prioridad
Presentación
Producto
Calidad
precio
Cantidad
función
Campo
utilidad
Manejo


Venta
Nombre
Linea
Edad
Funcion
Calidad
Tipo
Cliente
Vendedor
Producto
nombre
Edad
extends
1
1



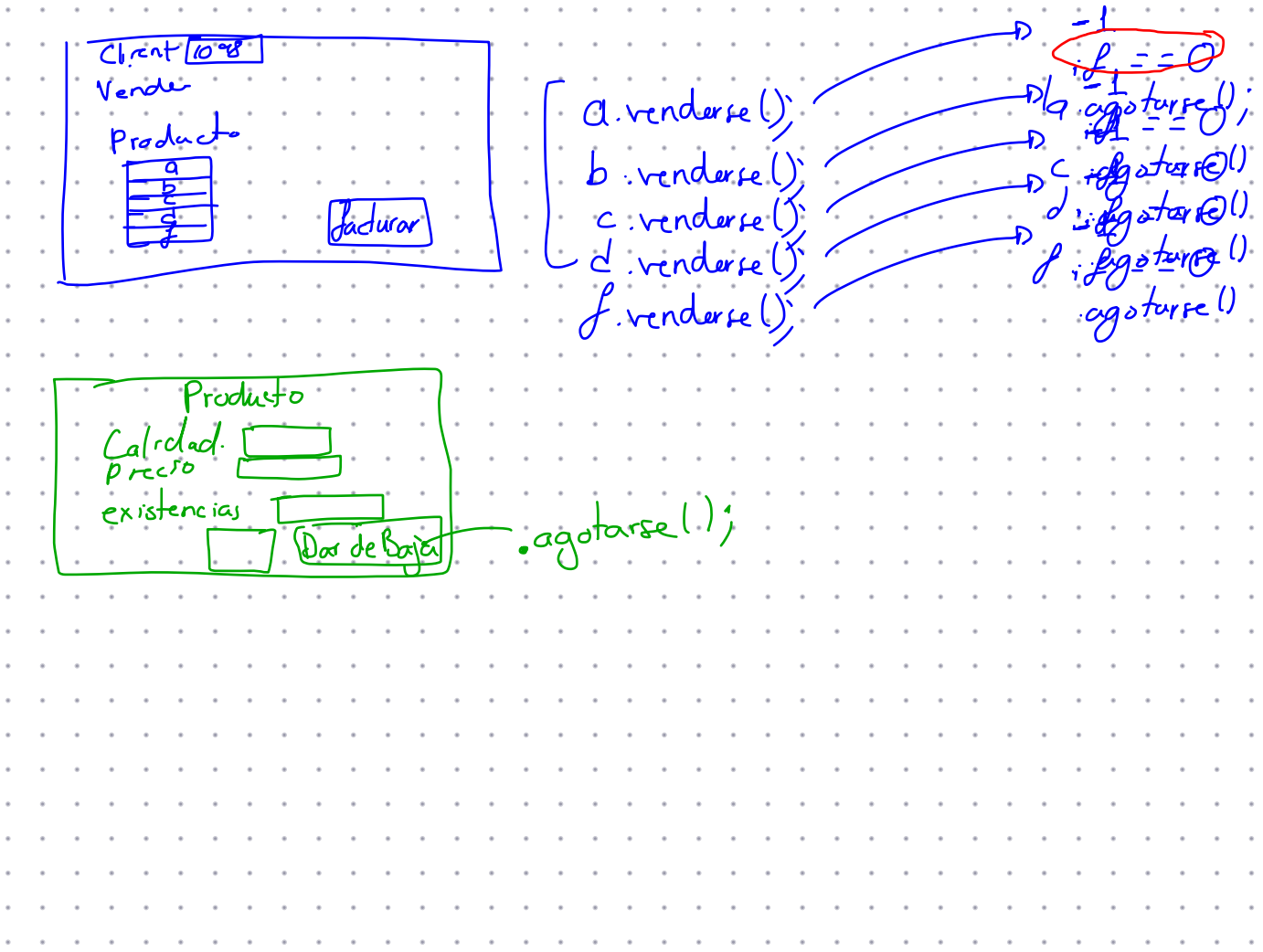

```
b = new Producto();
b.caducar();
b.venderse();
b.agotarse();
```

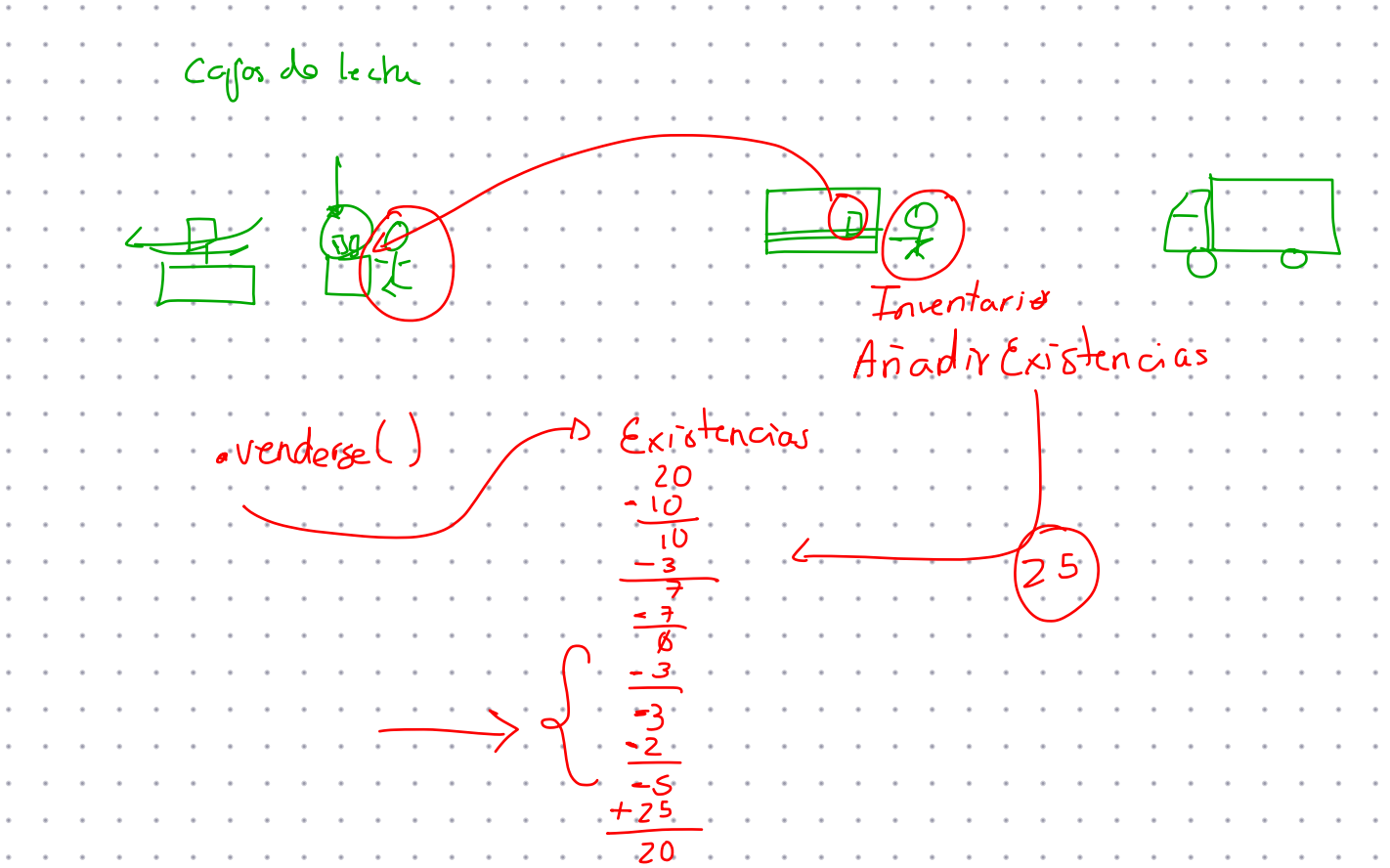
-1
-1
-1
-1
-1
∅
!!

Bombrillo

```
a.encender();
```

Comportamientos ≡ Acciones


Client
Vender
Producto
a
b
c
d
f
facturar
a.venderse();
b.venderse();
c.venderse();
d.venderse();
f.venderse();
-1
f == 0
a.agotarse();
Producto
Calidad
precio
existencias
Dar de Baja
.agotarse();


Cajas de leche
Inventario
Añadir Existencias
.venderse( )
Existencias
20
-10
10
-3
7
-7
0
-3
-3
-2
-5
+25
20
25

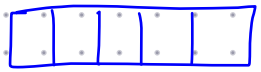
Objetos

Objetos como tipo de dato

Listas

Arrays ó Vectores

a[5] =>



① Solo consuman la mem necesaria

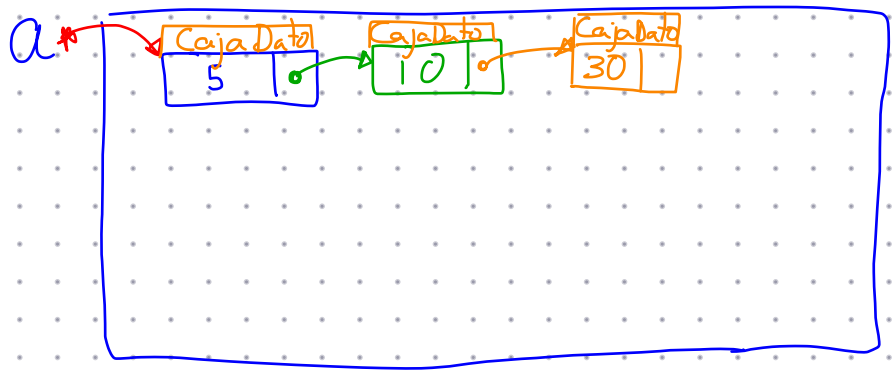
② Elasticos

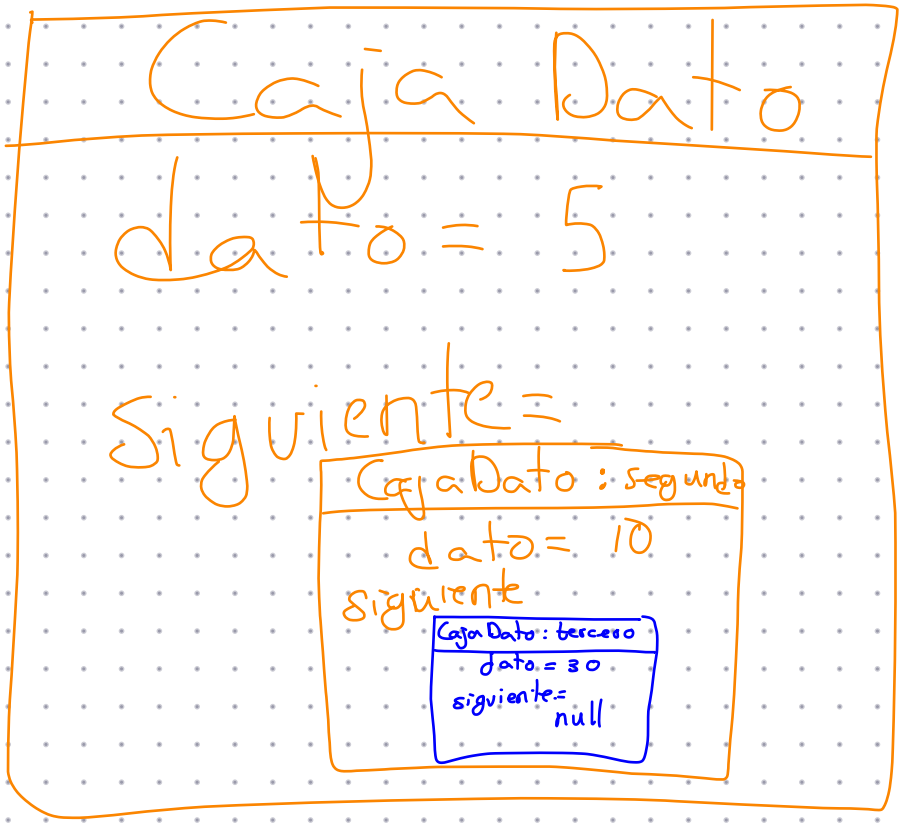
1, 2, 3 .... n

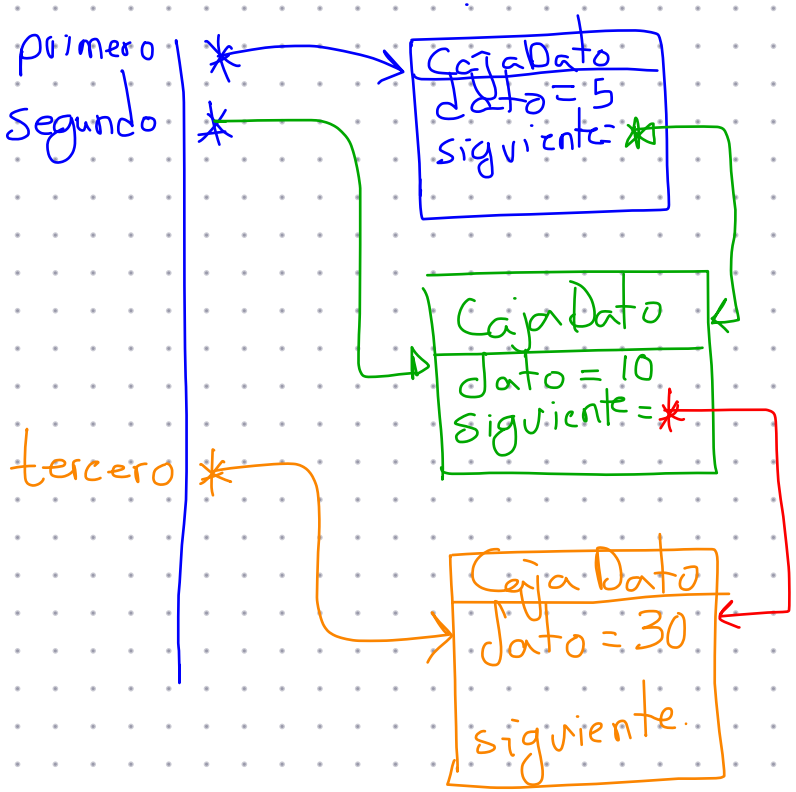
new Lista();

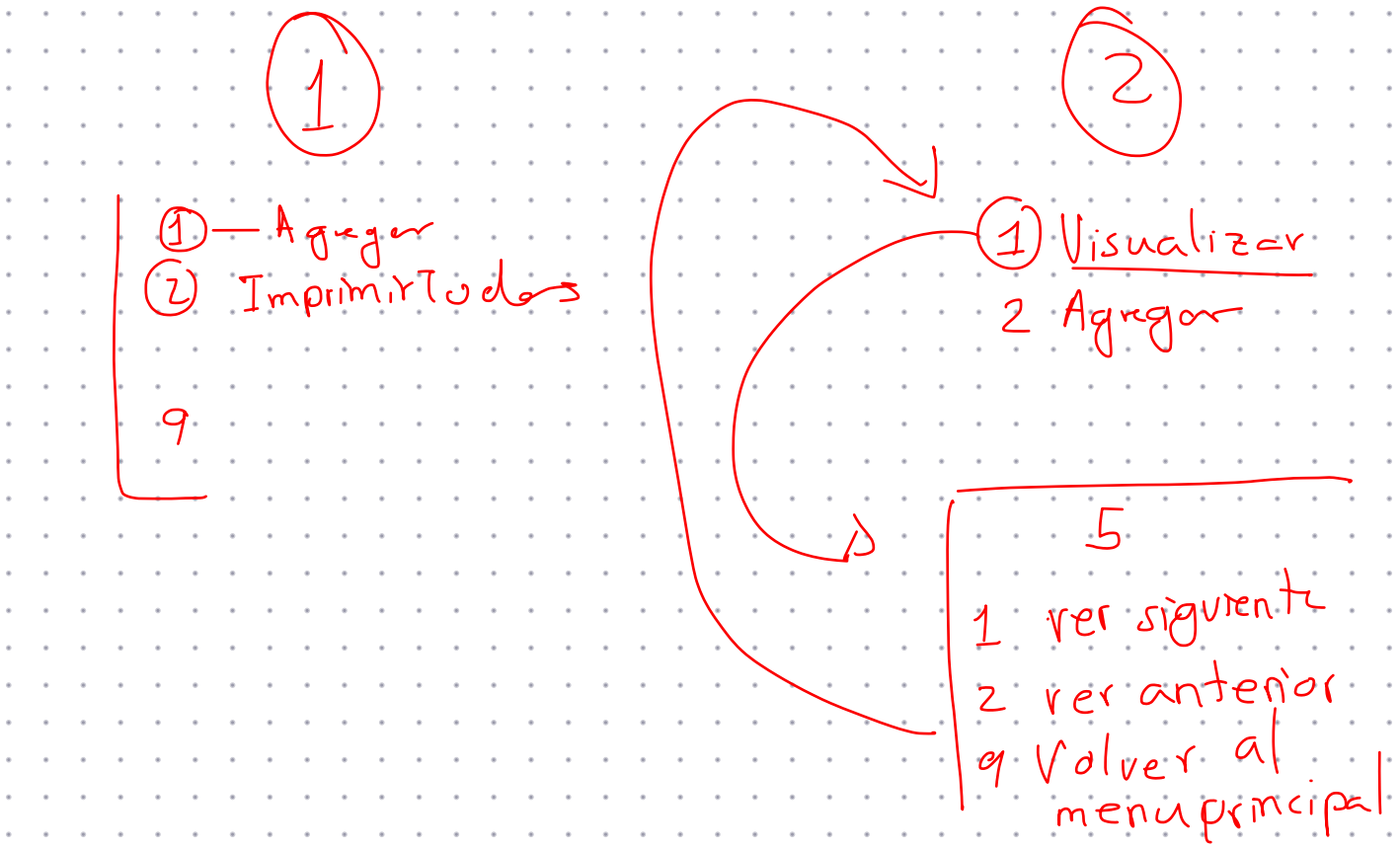
Funcion agregar

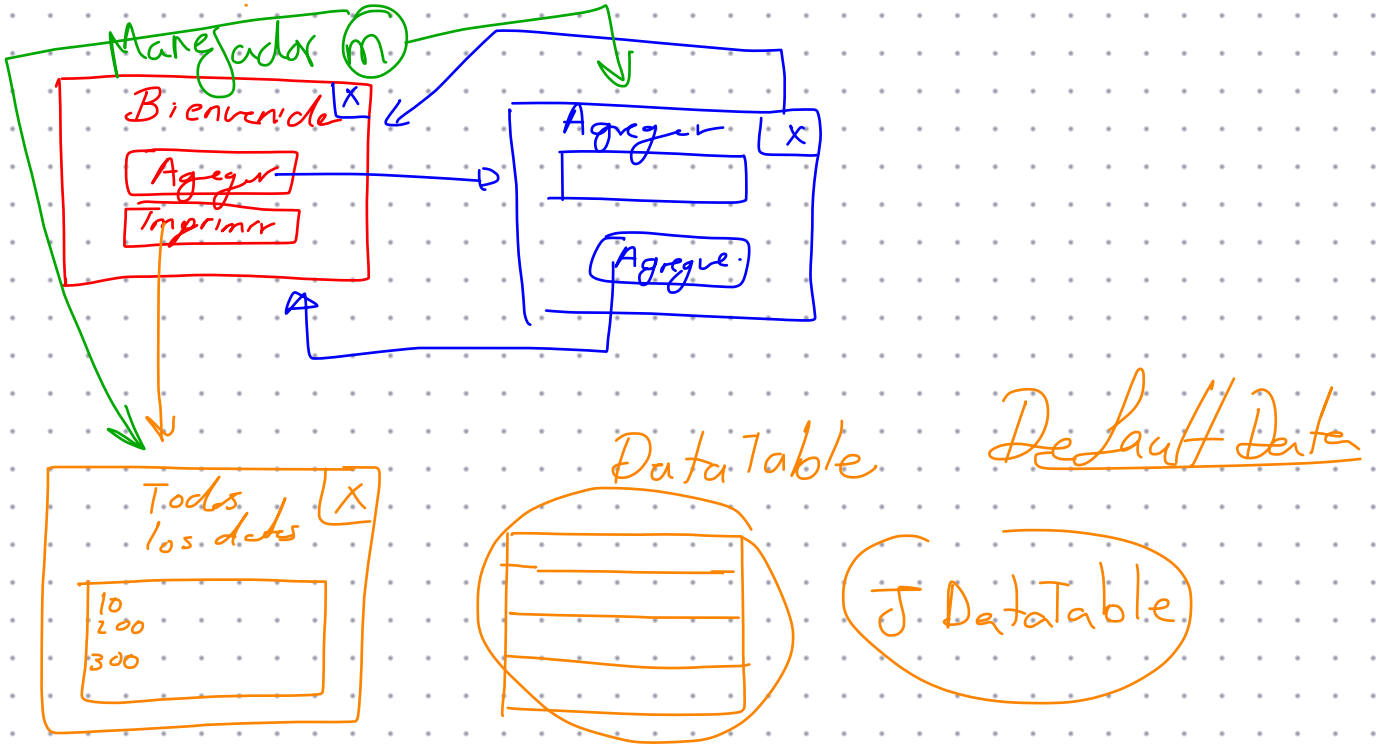
a.agregar(5);
a.agregar(10);
a.agregar(30);

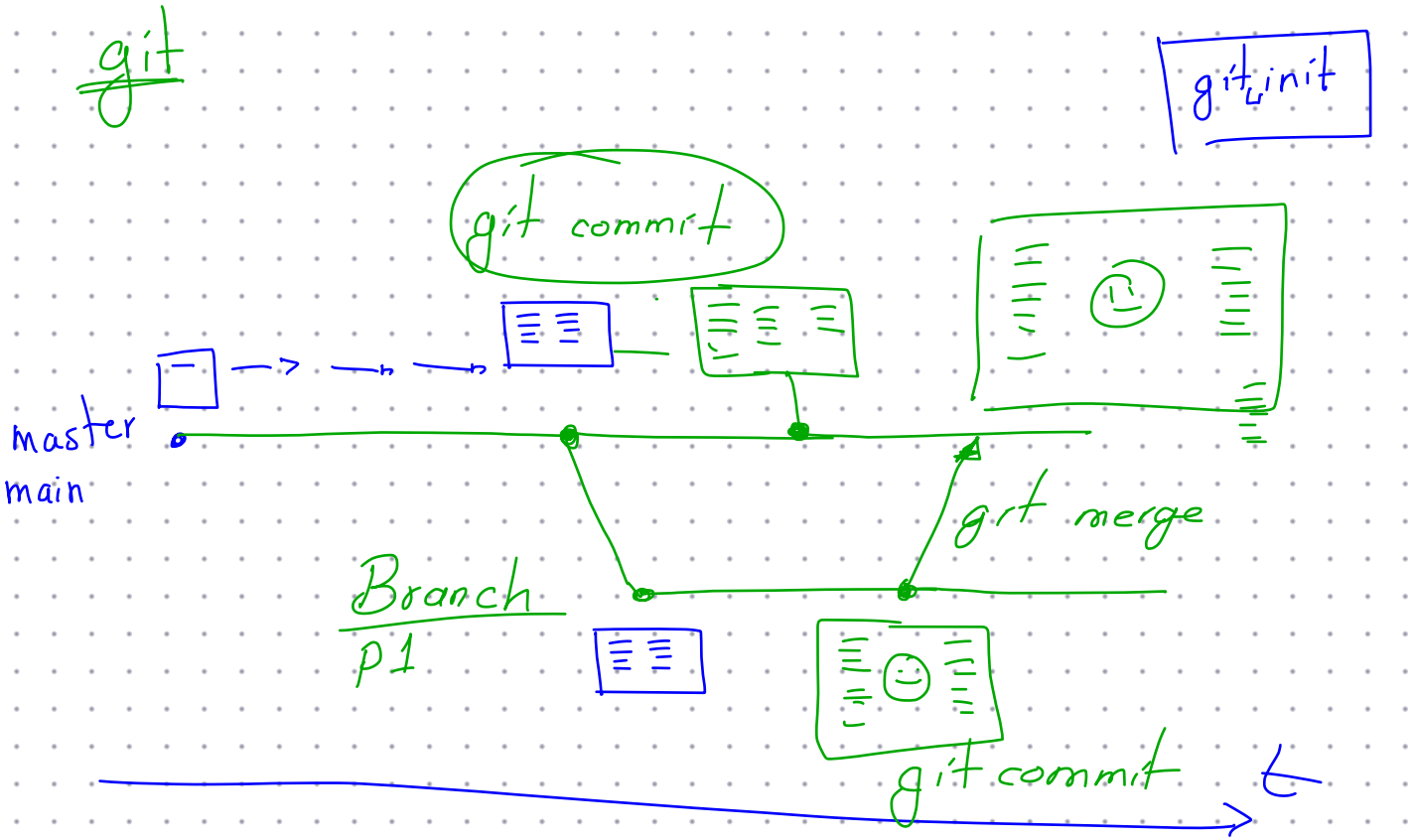



Caja Dato
dato = 5
siguiente =
CajaDato : segundo
dato = 10
siguiente
CajaDato : tercero
dato = 30
siguiente = null


primero
Segundo
tercero
CajaDato
dato = 5
siguiente
CajaDato
dato = 10
siguiente
CajaDato
dato = 30
siguiente.


1
1 — Agregar
2 Imprimir Todos
9
2
1 Visualizar
2 Agregar
5
1 ver siguiente
2 ver anterior
9 Volver al menu principal


Manejador
Bienvenido
Agregar
Imprimir
Agregar
Agregue
Todos los datos
10
200
300
DataTable
DefaultData
DataTable


git
git init
git commit
master
main
git merge
Branch
p1
git commit
t

Solo sea divisible por 1 y por el mismo

15

$1\div = 15$

$15\div = 1$

$\frac{15}{1} = 15 = \frac{x}{1} = x$

$\frac{15}{15} = \frac{1}{1} = 1 = \frac{x}{x} = 1$

$2 \longrightarrow x/2$

$2 \longrightarrow \frac{15}{2}$

$2 \longrightarrow 7$

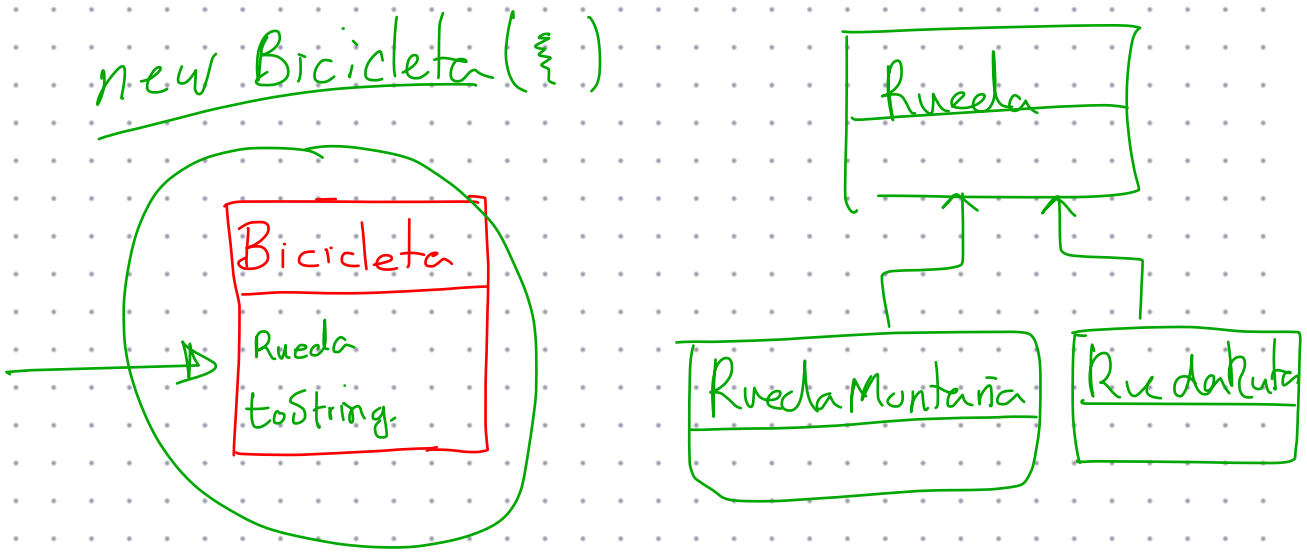
$15/2 \quad 15/3 \quad 15/4 \quad 15/5 \quad 15/6 \quad \frac{15}{7}$

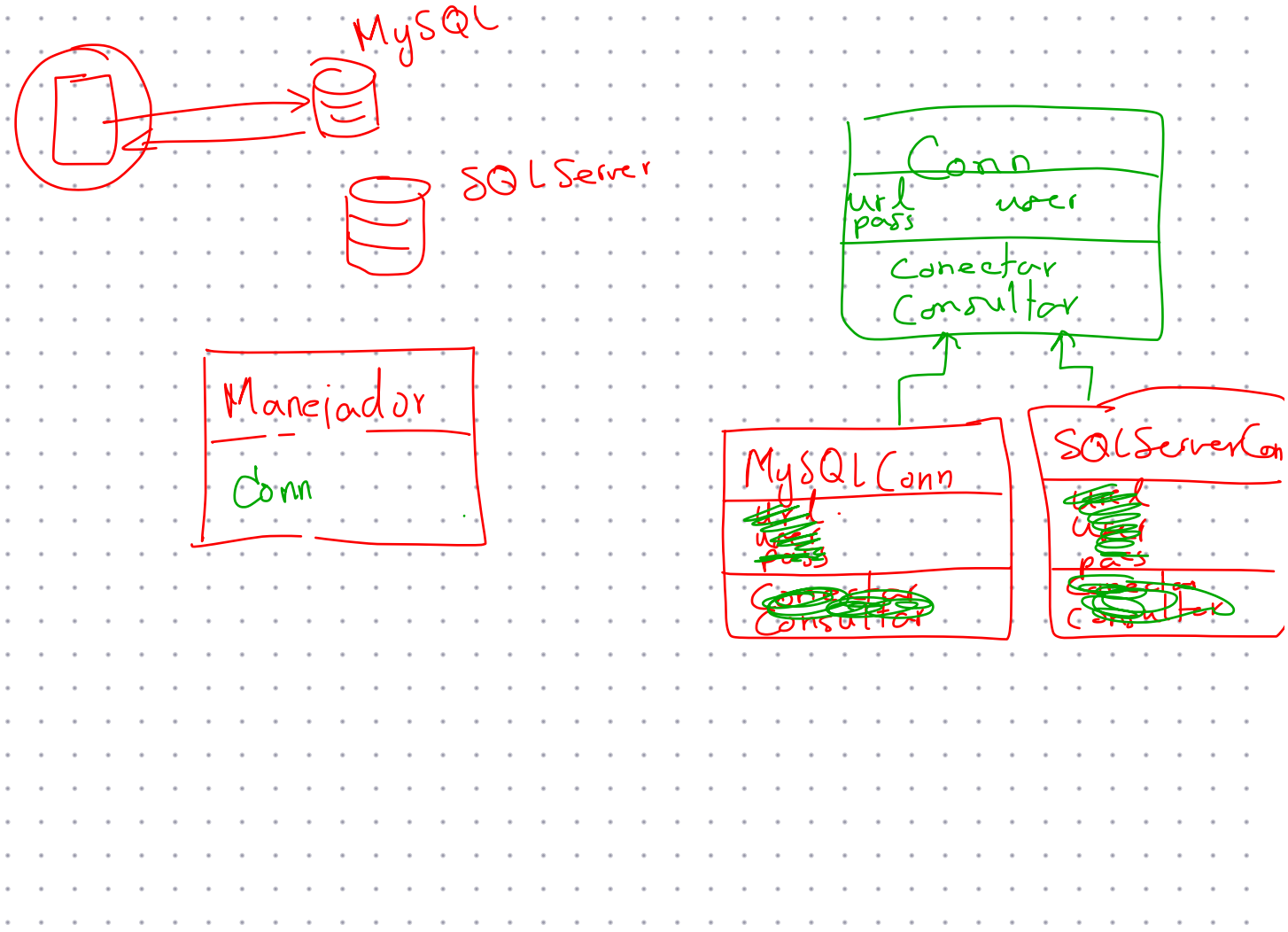
$15/2 = 7.5$

$15 \% 3 = 0$

$X \longrightarrow$ Probar $\{2 \longrightarrow X/2\}$ si las divisiones de X por cada numero no son exactos

- A la primera division exacta ya podriamos decir que no es numero primo


new Bicicleta( )
Bicicleta
Rueda
toString
Rueda
RuedaMontaña
RuedaRuta


MySQL
SQLServer
Manejador
Conn
Conn
url
user
pass
Conectar
Consultar
MysQLConn
SQLServerCon