Abstract class/abstract methods:

**package** com.te.variables.common;

**public** **abstract** **class** Dog {

**public** **abstract** **void** bark();

**public** **abstract** **void** eats();

**public** **void** poop() {

System.***out***.println("Dog is pooping");

}

}

**package** com.te.variables.common;

**public** **class** Labrador **extends** Dog {

**public** **void** bark() {

System.***out***.println("Labrador is barking!!");

}

@Override

**public** **void** eats() {

System.***out***.println("Labrador is eating!!");

}

}

**package** com.te.variables.common;

**public** **class** Rotweiler **extends** Dog{

@Override

**public** **void** bark() {

System.***out***.println("Rotweiler is barking!!");

}

@Override

**public** **void** eats() {

System.***out***.println("Rotweiler is eating!!");

}

}

**package** com.te.variables.common;

**public** **class** Main {

**public** **static** **void** main(String[] args) {

Labrador dog = **new** Labrador();

Rotweiler rotweiler = **new** Rotweiler();

dog.bark();

dog.eats();

dog.poop();

rotweiler.bark();

rotweiler.eats();

rotweiler.poop();

}

}

EG REALTIME LOOSE COUPLING:

**package** com.te.variables.common;

**abstract** **class** Car {

**public** **abstract** **void** start();

**public** **abstract** **void** accelarate();

**public** **abstract** **void** brakes();

}

**package** com.te.variables.common;

**public** **class** Audi **extends** Car {

@Override

**public** **void** start() {

System.***out***.println("Audi has started");

}

@Override

**public** **void** accelarate() {

System.***out***.println("Audi is accelarating");

}

@Override

**public** **void** brakes() {

System.***out***.println("Audi has stopped");

}

}

**package** com.te.variables.common;

**public** **class** Benz **extends** Car{

@Override

**public** **void** start() {

System.***out***.println("Benz has started");

}

@Override

**public** **void** accelarate() {

System.***out***.println("Benz is accelarating");

}

@Override

**public** **void** brakes() {

System.***out***.println("Benz has stopped");

}

}

**package** com.te.variables.common;

**public** **class** Bmw **extends** Car {

@Override

**public** **void** start() {

System.***out***.println("BMW has started");

}

@Override

**public** **void** accelarate() {

System.***out***.println("BMW is accelarating");

}

@Override

**public** **void** brakes() {

System.***out***.println("BMW has stopped");

}

}

**package** com.te.variables.common;

**public** **class** Driver {

**public** **void** drive(Car car) {

car.start();

car.accelarate();

car.brakes();

}

}

**package** com.te.variables.common;

**public** **class** Main {

**public** **static** **void** main(String[] args) {

Driver driver = **new** Driver();

driver.drive(**new** Audi());

System.***out***.println("--------------");

driver.drive(**new** Bmw());

System.***out***.println("--------------");

driver.drive(**new** Benz());

// Audi audi = new Audi();

// Bmw bmw = new Bmw();

// Benz benz = new Benz();

// audi.start();

// audi.accelarate();

// audi.brakes();

// System.out.println("----------------------");

//

// benz.start();

// benz.accelarate();

// benz.brakes();

// System.out.println("----------------------");

//

// bmw.start();

// bmw.accelarate();

// bmw.brakes();

}

}