|  |
| --- |
| **Person** |
| -name: String  -age : int |
| Person( name: String, age : int)  +getName() : String  +setName ( name: String)  +animal(): void  +car(): void  +main(String[]args):void |

|  |
| --- |
| ***Animal*** |
| #legs: int |
| #Animal(legs: int)  +walk()  +eat |

|  |
| --- |
| **Car** |
| model: String  company: String |
| +drive():void  +stop():void |

|  |
| --- |
| **Volvo** |
| -price: double  -productionYear: String  -registrationNumber: String |
| +changeFuel():void  +checkBattery():void |

|  |
| --- |
| **Cat** |
| +Cat(name: String)  +Cat()  +getName() : String  +setName ( name: String)  +play()  +eat() |

|  |
| --- |
| **<<interface>>**  **Pet** |
|  |
| +getName() : String  +setName( name: String)  +play() |

|  |
| --- |
| Engine |
| -capacity: double |
|  |

|  |
| --- |
| DashBoard |
| -size: double |
|  |

public class Person {

   private String name;

   private int age;

   Animal animal;

   Car car;

   public Person(String name, int age) {

       this.name = name;

       this.age = age;

   }

   public void setName(String name) {

       this.name = name;

   }

   public void setAge(int age) {

       this.age = age;

   }

   public String getName() {

       return name;

   }

   public int getAge() {

       return age;

   }

   public void animal() {

       System.out.println("I have a Cat");

   }

   public void car() {

       System.out.println("I have a car");

   }

       public static void main(String[] args) {

           Person p1= new Person("My name is Munna",22);

           System.out.println(("Name: "+p1.getName()));

           System.out.println("Age=" +p1.getAge());

           p1.animal();

           Cat cat1 = new Cat();

           cat1.play();

           cat1.eat();

           p1.car();

           Engine eng = new Engine(30.4);

           DashBoard db= new DashBoard(4.0);

           Volvo v=new Volvo(2000000,"2022", "DHA7653",eng,db);

           v.drive();

           v.stop();

           v.changeFuel();

           v.checkBattery();

           v.model="XC90";

           v.company="Volvo";

       }

   }

public abstract class Animal {

    protected int legs;

    protected Animal(int legs){

        this.legs = legs;

    }

    public Animal(String name, int age) {

    }

    public void walk(){

        System.out.println("Not all animal can walk.");

    }

    public abstract void eat();

}

public class Cat extends Animal implements Pet {

String name;

public Cat() {

super(4);

System.out.println();

}

public Cat(String name) {

super(4);

System.out.println("It has " + super.legs + " legs.");

this.name = name;

}

public void setName(String name) {

this.name = name;

}

public String getName() {

return name;

}

public void play() {

System.out.println("It play with me.");

}

public void eat() {

System.out.println("It eat every thing.\n");

}

}

public interface Pet {

public void setName(String name);

public String getName();

public void play();

}

public class Engine {

public double capacity;

public Engine(double capacity)

{

this.capacity=capacity;

}

}

public class DashBoard {

public double size;

public DashBoard(double size) {

this.size = size;

}

}

public class Car {

    public String model;

    public String company;

    public void Car(){

    }

    public void drive() {

        System.out.println("Driving");

    }

    public void stop()

    {

        System.out.println("Stopping");

    }

}

public class Volvo extends Car{

double price;

String productionYear;

String registrationNumber;

Engine eng;

DashBoard db;

public Volvo(double price, String productionYear, String registrationNumber, Engine eng, DashBoard db)

{

this.price=price;

this.productionYear=productionYear;

this.registrationNumber=registrationNumber;

this.eng=eng;

this.db=db;

}

public void changeFuel()

{

System.out.println("Changing Fuel");

}

public void checkBattery()

{

System.out.println("Checking battery");

}

}