package class11;

public class Car {

String color="White";

String make="Tesla";

String model="S3";

int year=2018;

int Hp=300;

void moveForward() {

System.out.println("Moving forward.....");

}

void movebackwards() {

System.out.println("Moving Backwards.....");

}

}

package class11;

public class Dog {

// State

// attributes/ properties/ fields

String name;

String color;

String breed;

double weight;

int age;

// These are the behaviours of a dog

// Methods functions

void bark() {

System.out.println("Barking..........");

}

void sleep() {

System.out.println("Dog is sleeping.......");

}

public static void main(String[] args) {

// creating objects from a class

//new Dog();=> it creates an object of class Dog

Dog dog1= new Dog();

// calling a behaviour on an object

dog1.bark();

dog1.sleep();

}

}

package class11;

public class Employee {

String name;

String id;

String department;

double salary;

String shift;

void work() {

System.out.println(name+" is working on shift "+shift);

}

void takeLeaves() {

System.out.println(name+" is going on leaves");

}

public static void main(String[] args) {

Employee emp1=new Employee();

emp1.name="john";

emp1.id="123";

emp1.department="IT";

emp1.salary=200000;

emp1.shift="Evening";

emp1.work();

Employee emp2= new Employee();

emp2.name="Adam";

emp2.department="Sales";

emp2.id="456A";

emp2.salary=150000;

emp2.shift="Morning";

emp2.work();

}

}

what is an Object?

Everything around us is an object for example keyboard, mouse, glass, etc.

Objects can be defined based on how they look and how they behave. Objects in computer programming are also

very similar. They have state(which helps us define how that object looks like) and behaviours (what that object

does)

What is class:

Class is blueprint/design/template from which we create the objects.

Object oriented programming:

Is just a way of writing programs.

Why we should learn OOP?

1)It simplify the development of large programs.

2)It will also help us maintain and modify the existing code.

3)It helps use write more secure code

4)It helps us avoid duplicate code.

What is the syntax?

package class11;

public class Person {

String name;

int age;

double weight;

boolean isFunny;

double height;

boolean losingHairs;

void study() {

if(name.equals("Anna")) {

System.out.println("I study hard");

}else if(name.equals("Roman")) {

System.out.println("I will keep on deleting the messages and will not let any one study");

}else {

System.out.println("i try to study but things don't make much sense");

}

}

public static void main(String[] args) {

Person person1=new Person();

person1.name="Roman";

person1.study();

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

Person person2=new Person();

person2.name="Yusuf";

person2.study();

}

}

package class11;

public class Phone {

String make;

String model;

String color;

int storage;

double size;

boolean cheap;

void call() {

System.out.println("calling .......");

}

void takePicture() {

System.out.println("Taking pictures");

}

public static void main(String[] args) {

// Name of Class variable name = new Name of class ();

Phone iphone=new Phone();

iphone.make="Apple";

iphone.model="Iphone 14 Pro Max";

iphone.color="Black";

iphone.storage=128;

iphone.size=6.8;

iphone.cheap=false;

System.out.println("Make "+iphone.make+" Model "+iphone.model);

iphone.call();

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

Phone samsungPhone=new Phone();

samsungPhone.make="Samsung";

samsungPhone.model="S22 Ultra";

samsungPhone.color="Grey";

samsungPhone.storage=256;

samsungPhone.size=6.7;

samsungPhone.cheap=false;

System.out.println(iphone.make);

System.out.println(samsungPhone.make);

}

}

package class11;

public class Student {

String name;

String id;

int age;

double weight;

char gender;

// Break till 8:56

void study() {

System.out.println(" Student is studying");

}

void deleteMessages() {

System.out.println("Deleting messeage from Discord");

}

void eat() {

System.out.println("Eating pizzzzzzzzza...");

}

public static void main(String[] args) {

//new Student()=> Creates the object of Student class

Student fraidoonObject= new Student();

fraidoonObject.name="Friadoon";

fraidoonObject.id="123";

fraidoonObject.age=22;

System.out.println(fraidoonObject.name);

System.out.println(fraidoonObject.age);

fraidoonObject.deleteMessages();

fraidoonObject.deleteMessages();

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

Student student2=new Student();

student2.name="Asma";

student2.age=16;

student2.weight=30;

student2.gender='F';

System.out.println(student2.name);

student2.eat();

}

}