Class and Object

IT22020

```
class Dog{
    String name;
    int age;
    void bark(){
        System.out.println(name + "is barking!");
    }
}

public class classANDobject{
    public static void main(String[] args){
        Dog myDog = new Dog();
        myDog.name = "Buddy";
        myDog.age = 3;
        myDog.bark();
    }
}
```

Access Modifier

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```
class BankAccount{
    private double balance;
    public void deposit(double amount){
        if(amount>0){
            balance+=amount;
        System.out.println("Deposited: $"+
                                amount);
        }}
public void withdraw(double amount){
        if(amount>0 && amount<=balance){
        balance-=amount;
    System.out.println("withdraw: $"+amount);
    }else
    System.out.println("Insufficient balance
        or ivalid amount!");
    }
public double getBalance(){
        return Balance;
    }}
```

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Inheritance and Protected Access

```
class Vehicle {
    protected String brand = "Generic vehicle";

    void start() {
        System.out.println(brand + " is starting...");
    }
}

class Bike extends Vehicle {

    void ride() {
        System.out.println("Riding the " + brand);
    }
}

public class Inheritance_and_Protected_Access {
    public static void main(String[] args) {
        Bike myBike = new Bike();
        myBike.start();
        myBike.ride();
    }
}
```

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Encapsulation

```
class Student {
    private int age;
    private String name;
public void setName(String newName){
    name = newName;
    }
public String getName(){
    return name;
    }
public void setAge(int newAge){
    if(newAge>0){
    age = newAge;
    }}
public int getAge(){ return age;}}
Public class Encaptulation {
    public static void main(String[] args){
    Student s=new Student();
    s.setName("John");
    s.setAge(28);
```

```
System.out.println("Name :"+ s.getName());
System.out.println ("Age :"+ s.getAge());
    }
}
```

Abstract Class

```
abstract class Shape{
    abstract void draw();
  void info(){
      System.out.println("This is a shape.");
  }}
class Circle extends Shape{
    void draw(){
    System.out.println("Drawing a circle.");
  }}
public class abstruct class{
      public static void main(String[] args){
    Circle c = new Circle();
        c.draw(); c.info();}}
```

Interface

17/2/2020

```
interface Vehicle1{
        void start();}

class Car implements Vehicle1{
    public void start(){
      System.out.println("Car is starting...");
    }
}

public class interface1{
    public static void main(String[] args){
      Car myCar = new Car();
        myCar.start();
    }
}
```