```java
package Project10May;
public class ClassAndObject {
    int x = 5;
    public static void main(String[] args) {
        ClassAndObject myObj1 = new ClassAndObject();
        ClassAndObject myObj2 = new ClassAndObject();
        System.out.println(myObj1.x);
        System.out.println(myObj2.x);
    }
}
```
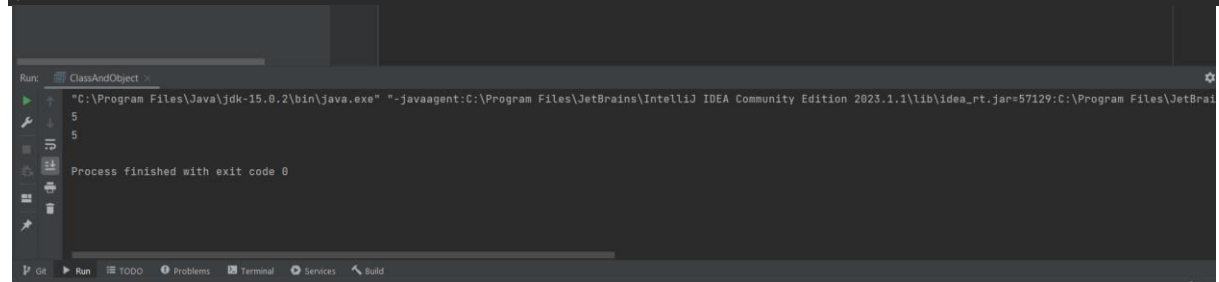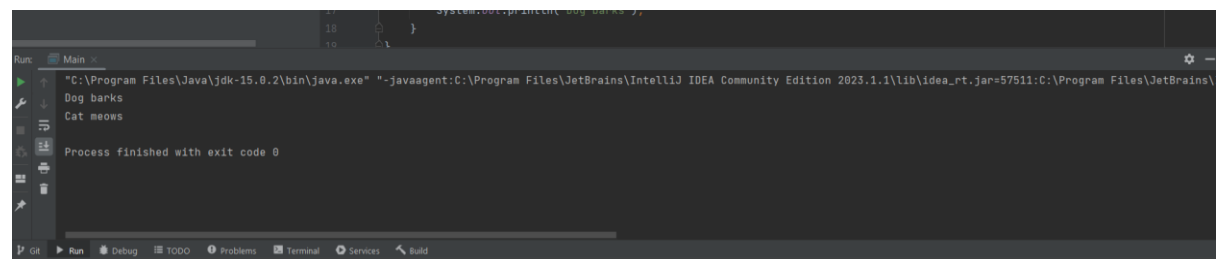
Polymorphism

```java
package Project10May;
public class Main {
    public static void main(String[] args) {
        Animal a1 = new Dog();
        Animal a2 = new Cat();
        a1.makeSound();
        a2.makeSound();
    }
}
class Animal {
    public void makeSound() {
        System.out.println("Animal makes a sound");
    }
}
class Dog extends Animal {
    public void makeSound() {
        System.out.println("Dog barks");
    }
}
class Cat extends Animal {
    public void makeSound() {
        System.out.println("Cat meows");
    }
}
```
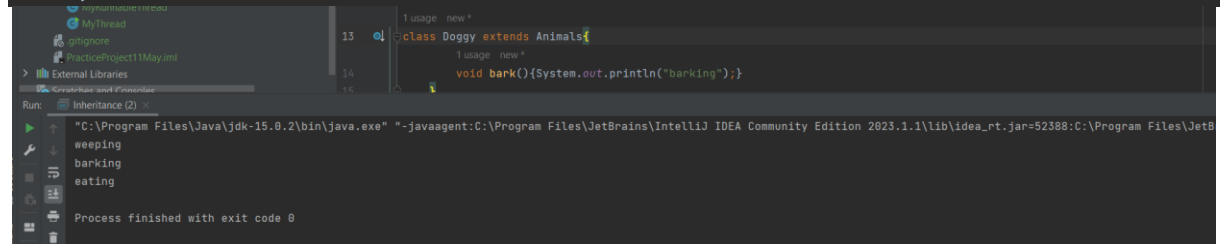
Inheritance

```java
package Project10May;

public class Inheritance {
```

```java
    public static void main(String args[]){
        BabyDog d=new BabyDog();
        d.weep();
        d.bark();
        d.eat();
    }}
    class Animals{
    void eat(){System.out.println("eating");}
}
class Doggy extends Animals{
        void bark(){System.out.println("barking");}
    }
    class BabyDog extends Doggy{
        void weep(){System.out.println("weeping");}
    }
```


Encapsulation

```java
package Project10May;

public class Encapsulation {
    public static void main(String[] args){
        Ashish s=new Ashish();
        s.setName("ashish");
        System.out.println(s.getName());
    }
}
```
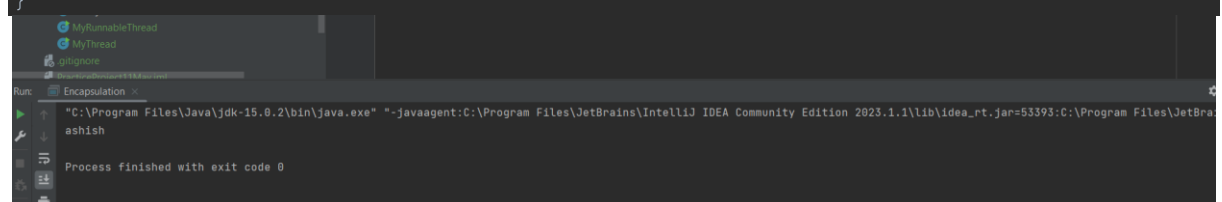
```java
package Project10May;

public class Ashish {
    private String name;

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }
}
```
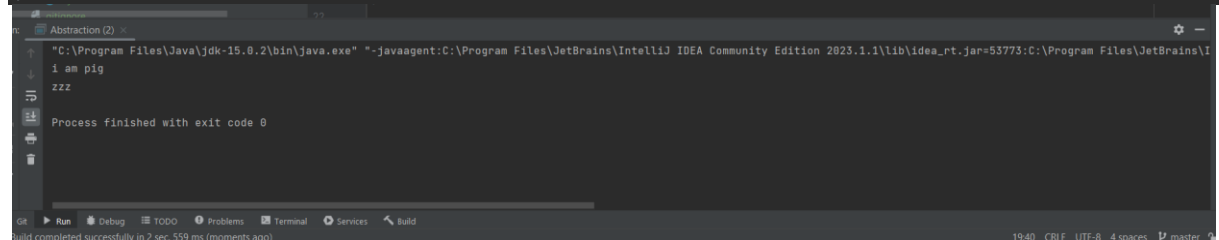
Abstraction

```java
package Project10May;

public class Abstraction {
    public static void main(String[] args) {
        Pig myPig = new Pig();
        myPig.animalSound();
        myPig.sleep();
    }
}
abstract class Anima {
    public abstract void animalSound();
    public void sleep() {
        System.out.println("zzz");
    }
}

class Pig extends Anima {
    public void animalSound() {
        System.out.println("i am pig");
    }
}
```