Methods

Access Modifiers

Access Modifiers

`private`	method or field can be accessed only within the class in which they are declared
default (no keyword)	method or field can be accessed only within the same package
`protected`	method or field can be accessed within the same package and outside the package through child class
`public`	method of field can be accessed from everywhere in the program

```java
class Dog {

  private String genus = "Canis";

}


public class MyClass {

  public static void main(String[] args) {

  Dog dog = new Dog();

  System.out.println(dog.genus);   does not compile

  }
}
```

```
class Dog {

  private String genus = "Canis";

  public void printGenus() {

    System.out.println("Genus: " + genus);

  }

}


public class MyClass {

  public static void main(String[] args) {

  Dog dog = new Dog();

  dog.printGenus();    ok

  }

}
```

```
Genus: Canis
```

```
// Dog.java
package zoo.dogs;

public class Dog {

    String genus = "Canis";

}
```

default

access modifier

```
// MyClass.java
package zoo.dogs;

public class MyClass {

    public static void main(String[] args) {

    Dog dog = new Dog();

    System.out.println(dog.genus);    ok

  }

}
```

Canis

```java
// Dog.java
package zoo.dogs;
public class Dog {
    protected String genus = "Canis";
}


// Husky.java
package zoo.huskys;
import zoo.dogs.*;
public class Husky extends Dog {
    public static void main(String[] args) {
        Husky husky = new Husky();
        System.out.println(husky.genus);  // ok
    }
}
```

ok

Canis