

## 10.4 Classwork

```
import java.util.Scanner;
```

```
public class PetInformation {
```

```
    public static void main(String[] args) {
```

```
        Scanner scnr = new Scanner(System.in);
```

```
        Pet myPet = new Pet();
```

```
        Dog myDog = new Dog();
```

```
        String petName, dogName, dogBreed;
```

```
        int petAge, dogAge;
```

```
        petName = scnr.nextLine();
```

```
        petAge = scnr.nextInt();
```

```
        scnr.nextLine();
```

```
        dogName = scnr.next();
```

```
        dogAge = scnr.nextInt();
```

```
        scnr.nextLine();
```

```
        dogBreed = scnr.nextLine();
```

```
        // TODO: Create generic pet (using petName, petAge) and then call printInfo
```

```
        myPet.setName(petName);
```

```
        myPet.setAge(petAge);
```

```
        myPet.printInfo();
```

```
        // TODO: Create dog pet (using dogName, dogAge, dogBreed) and then call printInfo
```

```
        myDog.setName(dogName);
```

```

    myDog.setAge(dogAge);
    myDog.setBreed(dogBreed);
    myDog.printInfo();
    // TODO: Use getBreed(), to output the breed of the dog
    System.out.println("The breed of the dog is " + myDog.getBreed());

}
}

```

## 10.15

// TODO: Define a class: StringInstrument that is derived from the Instrument class

```

public class StringInstrument extends Instrument {
    // TODO: Declare private fields: numStrings, numFrets
    private int numStrings;
    private int numFrets;

    // TODO: Define mutator methods -
    //    setNumOfStrings(), setNumOfFrets()
    public void setNumOfStrings(int userStrings){
        numStrings = userStrings;
    }

    public void setNumOfFrets(int userFrets){
        numFrets = userFrets;
    }
}

```

```

// TODO: Define accessor methods -
//   getNumOfStrings(), getNumOfFrets()

public int getNumOfStrings (){
    return numStrings;
}

public int getNumOfFrets(){
    return numFrets;
}
}

```

## 10.17

```

public class Encyclopedia extends Book {
    // TODO: Declare private fields: edition, numVolumes
    private String edition;
    private int numVolumes;

    // TODO: Define mutator methods -
    //   setEdition(), setNumVolumes()
    public void setEdition(String userEdition){
        edition = userEdition;
    }

    public void setNumVolumes(int userNumVolumes){
        numVolumes = userNumVolumes;
    }
}

```

```
// TODO: Define accessor methods -  
//      getEdition(), getNumVolumes()  
public String getEdition(){  
    return edition;  
}  
  
public int getNumVolumes(){  
    return numVolumes;  
}  
  
// TODO: Define a printInfo() method that overrides  
//      the printInfo in Book class  
  
@Override  
public void printInfo(){  
    super.printInfo();  
    System.out.println("  Edition: " + edition);  
    System.out.println("  Number of Volumes: " + numVolumes);  
}  
}
```