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Batch: **1154**

Homework: **Access Modifiers**

Package pack1:

```java
package pack1;
//Example of using private access modifier
class PrivateExample {
    private int privateVariable;
    private void privateMethod() {
        System.out.println("This is a private method.");
    }
}
//Example of default access modifier (no modifier)
class DefaultExample {
    int defaultVariable; // default access modifier
    void defaultMethod() { // default access modifier
        System.out.println("This is a default (package-private)
method.");
    }
}
//Example of accessing members from another class
public class AccessModifiers {
    public static void main(String[] args) {
        PublicExample publicObj = new PublicExample();
        publicObj.publicVariable = 10;
        publicObj.publicMethod();
        // PrivateExample privateObj = new PrivateExample(); // This
would compile
        // privateObj.privateVariable = 20; // This would cause a
compilation error
```

```java
        // privateObj.privateMethod(); // This would cause a
compilation error
        ProtectedExample protectedObj = new ProtectedExample();
        protectedObj.protectedVariable = 30;
        protectedObj.protectedMethod();
        DefaultExample defaultObj = new DefaultExample();
        defaultObj.defaultVariable = 40;
        defaultObj.defaultMethod();
    }
}
```

```java
package pack1;
//Example of using public access modifier
public class PublicExample {
public int publicVariable;
public void publicMethod() {
  System.out.println("This is a public method.");
}
}
```

```java
package pack1;
//Example of using protected access modifier
public class ProtectedExample {
    protected int protectedVariable;
    protected void protectedMethod() {
        System.out.println("This is a protected method.");
    }
}
```

Package pack2:

```java
package pack2;
import pack1.PublicExample;
import pack1.ProtectedExample;
// example of protected access modifier
public class Pack2Class extends ProtectedExample {
    public static void main(String[] args) {

        PublicExample pobj = new PublicExample();
        System.out.println(pobj.publicVariable);
        pobj.publicMethod();

        Pack2Class pkobj = new Pack2Class();
        System.out.println(pkobj.protectedVariable);
    }
}
```