```java
package AcessModifier;
import java.util.*;
import java.util.Scanner;

	public class AcessModifier{
	    public static void main(String[] args) {
	        Scanner s = new Scanner(System.in);

	        // Creating a new object of the MyClass class
	        MyClass obj = new MyClass();

	        // Prompting the user to enter a number
	        System.out.print("Enter a number: ");
	        int input = s.nextInt();

	        // Calling the public method of the class
	        obj.publicMethod(input);

	        // Attempting to call the private method of the class (will
result in a compile-time error)
	        // obj.privateMethod(input);

	        // Calling the protected method of the class through
inheritance
	        MySubClass subObj = new MySubClass();
	        subObj.accessProtectedMethod(input);
	    }
	}

	class MyClass {
	    public void publicMethod(int number) {
	        System.out.println("The public method was called with input:
" + number);
	    }

	    private void privateMethod(int number) {
	        System.out.println("This is a private method.");
	    }

	    protected void protectedMethod(int number) {
	        System.out.println("The protected method was called with
input: " + number);
	    }
	}

	class MySubClass extends MyClass {
	    public void accessProtectedMethod(int number) {
	        // Accessing the protected method of the superclass through
inheritance
	        protectedMethod(number);
	    }
	}
```

Output:

```
Enter a number: 52
The public method was called with input: 52
The protected method was called with input: 52
```