2. Write a program in java to implement access modifiers

**package** accessmodifier;

**public** **class** AccessModifier {

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

// Create an instance of the MyClass class

MyClass myObject = **new** MyClass();

// Accessing public members

myObject.publicMethod();

**int** publicVar = myObject.publicVariable;

// Accessing protected members

myObject.protectedMethod();

**int** protectedVar = myObject.protectedVariable;

// Accessing default (package-private) members

myObject.defaultMethod();

**int** defaultVar = myObject.defaultVariable;

// Uncommenting the following lines will result in compilation errors

// because private members are not accessible outside the class

// myObject.privateMethod();

// int privateVar = myObject.privateVariable;

}

}

**class** MyClass {

**public** **int** publicVariable;

**protected** **int** protectedVariable;

**int** defaultVariable; // default (package-private) access

**private** **int** privateVariable;

**public** **void** publicMethod() {

System.***out***.println("This is a public method");

}

**protected** **void** protectedMethod() {

System.***out***.println("This is a protected method");

}

**void** defaultMethod() {

System.***out***.println("This is a default method");

}

**private** **void** privateMethod() {

System.***out***.println("This is a private method");

}

}

Output:

