# 17. PROBLEM:

Write a program that creates illustrates different levels of protection in classes/subclasses belonging to same package or different packages.

# SOURCECODE:

package pack1;

public class assignment17

{

/\*private void display\_private()

{

System.out.println("I am in private display);

}\*/

void display\_void()

{

System.out.println("I am in void display);

}

protected display\_protected()

{

System.out.println("I am in protected display);

}

Public void display\_public()

{

System.out.println("I am in public display);

}

void display()

{

//display\_private():

display\_void();

display\_protected();

display\_public();

}

}

package pack1;

class assignment17\_a extends assignment17

{

public void display()

{

//display\_private():

display\_void();

display\_protected();

display\_public();

}

}

package pack1;

public class assignment17\_b

{

assignment17 ob1=new assignment17();

//ob1.display\_private();

ob1.display\_void();

ob1.display\_protected();

ob1.display\_public();

}

package pack2.assignment17;

public class assignment17\_d

{

assignment17 ob2=new assignment17();

//ob2.display\_private();

//ob2.display\_void();

//ob2.display\_protected();

ob2.display\_public();

}

# OUTPUT:

### In case of class assignment17:

I am in void display

I am in protected display

I am in public display

### In case of assignment17\_a class:

I am in void display

I am in protected display

I am in public display

### In case of assignment17\_b class:

I am in void display

I am in protected display

I am in public display

### In case of assignment17\_d class:

I am in public display

# DISCUSSION:

1.Here we demonstrates a program that creates illustrates different levels of protection in classes/subclasses belonging to same package or different packages.

2.In case of assignment17 class display function we only see public,void,and protected methods are displayed.

3.In assignment17\_a public,protected and void methods are shown as it resides in the same package.

3.In assignment17\_b also public,protected and void methods are shown because they are in the same package but not extending the class assignment17.

4.In assignment17\_d class as it is from another package it only shows the public method.