Program 4:

Addition.java:

**package** com.hcl.assign1;

/\*\*

\* This class illustrates the difference between access specifiers

\*

\*/

**public** **class** Addition { // main class

**private** **int** a, b; // intialise valriables in private access

**protected** **int** c, d;// initialise variables in protected access

**public** **int** i, j; // initialise variables in public access

/\*\*

\* This protected method is used within package and subclass in other package

\*

\* **@param** c

\* **@param** d

\* **@return**

\*/

**protected** **int** addTwoNumbers(**int** c, **int** d)// protected method arguments

{

**return** c + d; // return result of two add numbers

}

/\*\*

\* This private method is used within class only

\*

\* **@param** i

\* **@param** j

\* **@return**

\*/

**public** **int** addTwoNumbers1(**int** i, **int** j) // public method arguments

{

**return** i + j; // return result of two add numbers

}

/\*\*

\* This public is used in anywhere

\*

\* **@param** a

\* **@param** b

\* **@return**

\*/

**private** **int** addTwoNumbers2(**int** a, **int** b) // private method arguments

{

**return** a + b; // return result of two add numbers

}

/\*\*

\* **@param** args

\*/

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

// **TODO** Auto-generated method stub

System.***out***.println("Usage of the program\n The program is used to illustrate the access specifiers");

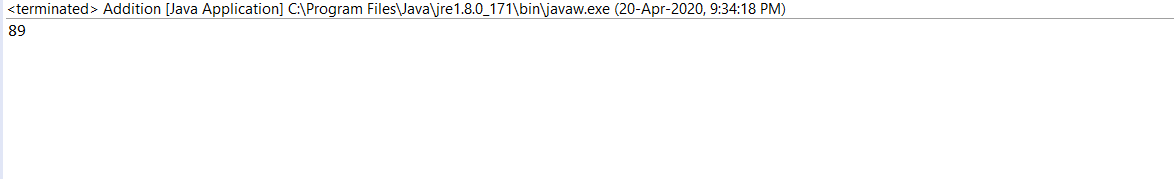
Addition obj = **new** Addition(); // Creating object for class

System.***out***.println(obj.addTwoNumbers(2, 87));// calling private method by using object

}

}

Output:



Test.java

**package** com.assign1;

**import** com.hcl.assign1.\*;

/\*\*

\* This class extends the main class

\*

\*/

**class** Test **extends** Addition { // inheriting main class

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

// **TODO** Auto-generated method stub

Test obj = **new** Test(); // Creating object for Test class

Addition add = **new** Addition(); // Creating object for Addition class

System.***out***.println(obj.addTwoNumbers(10, 12)); // printing output by using object

System.***out***.println(add.addTwoNumbers1(100, 1)); // printing output by using object

}

}

Output:

