

Task A

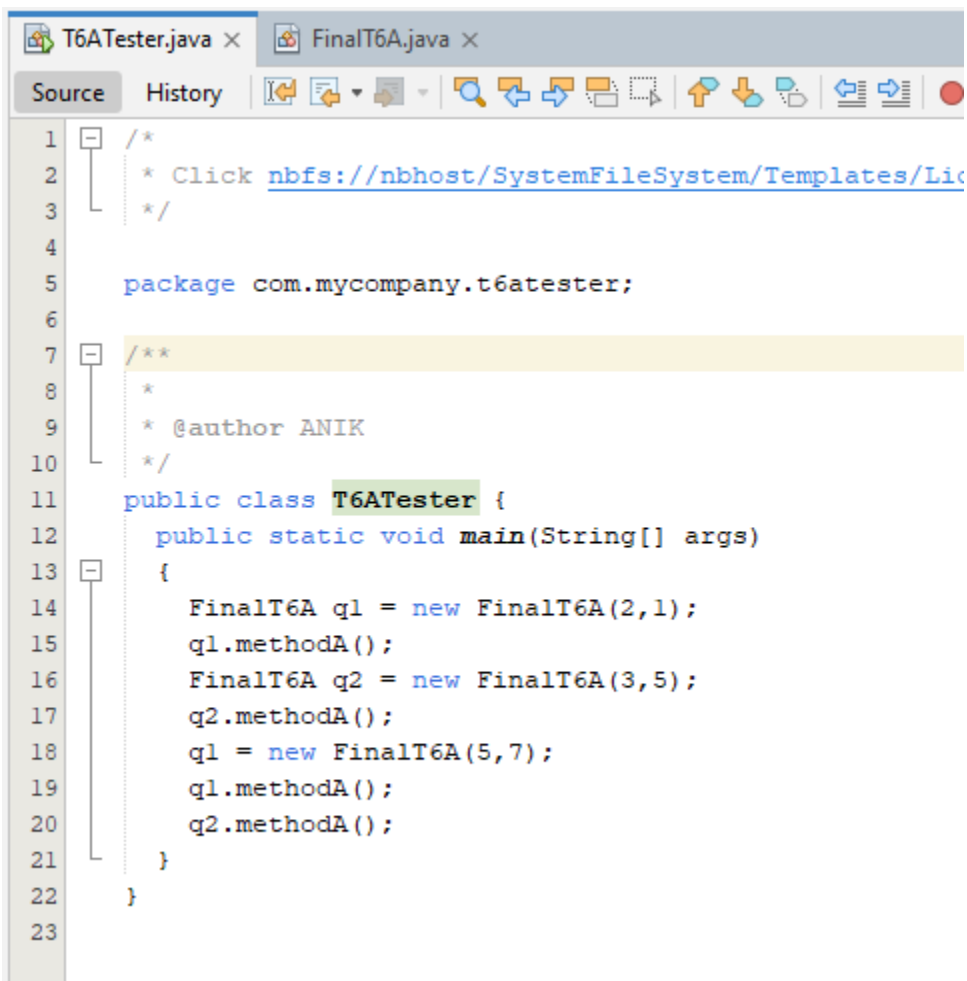
Explanation :

The provided code demonstrates the creation and manipulation of instances of the `FinalT6A` class within the `T6ATester` class. The `FinalT6A` class has a constructor that initializes instance variables and a `methodA` that updates these variables. The `T6ATester` class creates and interacts with `FinalT6A` objects to showcase their behavior.

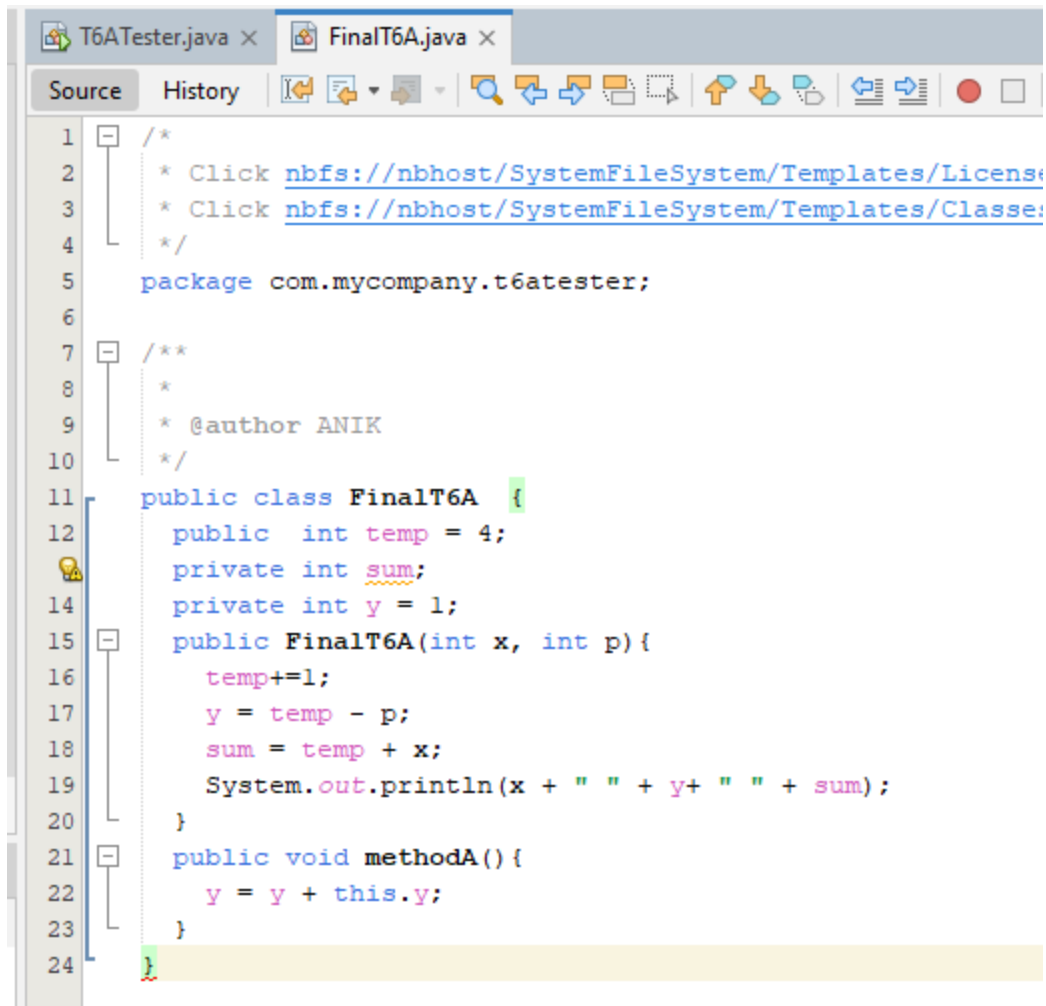
Code Screenshots:

Input:

T6ATester.java



```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Lic
3   */
4
5  package com.mycompany.t6atester;
6
7  /**
8   *
9   * @author ANIK
10  */
11  public class T6ATester {
12      public static void main(String[] args)
13      {
14          FinalT6A q1 = new FinalT6A(2,1);
15          q1.methodA();
16          FinalT6A q2 = new FinalT6A(3,5);
17          q2.methodA();
18          q1 = new FinalT6A(5,7);
19          q1.methodA();
20          q2.methodA();
21      }
22  }
23
```



```
1  /*
2   * Click nbfs:///nbhost/SystemFileSystem/Templates/Licenses
3   * Click nbfs:///nbhost/SystemFileSystem/Templates/Classes
4   */
5  package com.mycompany.t6atester;
6
7  /**
8   *
9   * @author ANIK
10  */
11  public class FinalT6A {
12      public int temp = 4;
13      private int sum;
14      private int y = 1;
15      public FinalT6A(int x, int p) {
16          temp+=1;
17          y = temp - p;
18          sum = temp + x;
19          System.out.println(x + " " + y + " " + sum);
20      }
21      public void methodA() {
22          y = y + this.y;
23      }
24  }
```

Output:

```
Output - Run (T6ATester) ×
cd F:\sumaiya the V.I.P\sem 14\OOP\assignments\A\T6ATester; "JAVA_HOME=C:\Program Fil
Scanning for projects...

-----< com.mycompany:T6ATester >-----
Building T6ATester 1.0-SNAPSHOT
  from pom.xml
-----[ jar ]-----

--- resources:3.3.1:resources (default-resources) @ T6ATester ---
skip non existing resourceDirectory F:\sumaiya the V.I.P\sem 14\OOP\assignments\A\T6AT

--- compiler:3.11.0:compile (default-compile) @ T6ATester ---
Changes detected - recompiling the module! :source
Compiling 2 source files with javac [debug target 21] to target\classes

--- exec:3.1.0:exec (default-cli) @ T6ATester ---
2 4 7
3 0 8
5 -2 10

BUILD SUCCESS

Total time: 0.849 s
Finished at: 2024-06-22T21:42:08+06:00

|
```

Task B

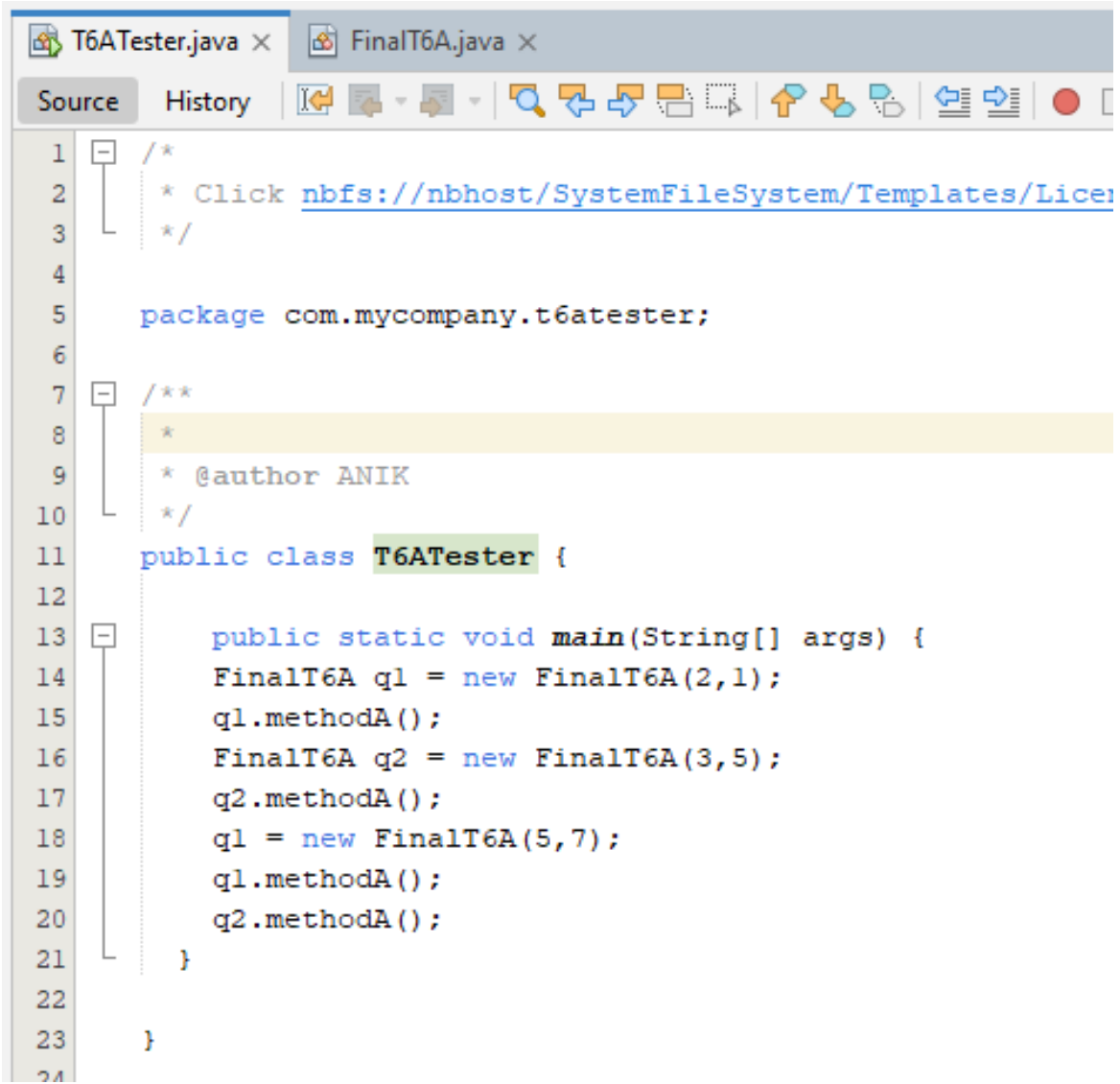
Explanation :

The task involves creating a Java program that demonstrates the use of a subclass (`FinalT6A`) within a main class (`T6ATester`). The `FinalT6A` class has a constructor that initializes instance variables and a method (`methodA`) that updates one of these variables. The `T6ATester` class creates instances of `FinalT6A` and calls `methodA` to display the updated values.

Code Screenshots:

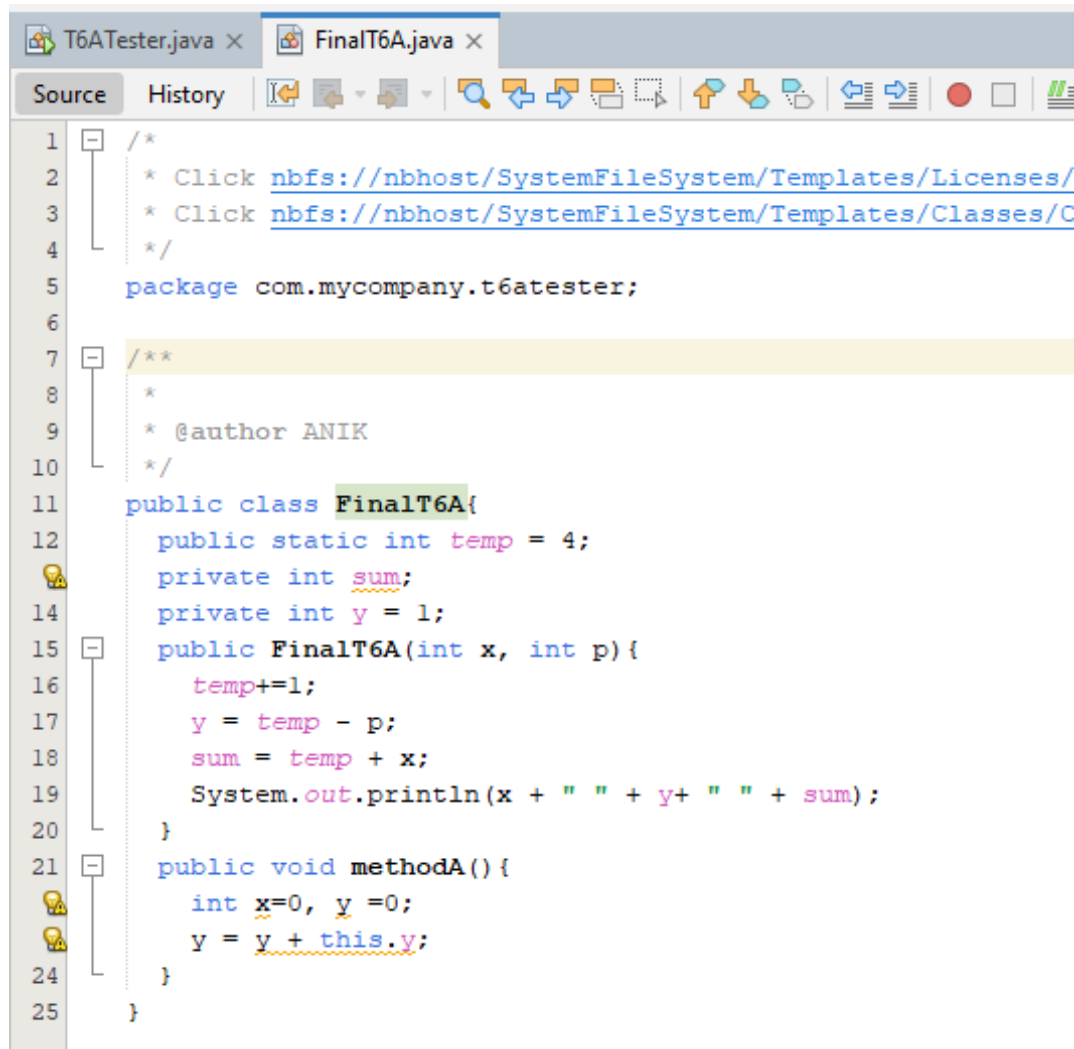
Input:

T6ATester.java



```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses
3   */
4
5   package com.mycompany.t6atester;
6
7   /**
8    *
9    * @author ANIK
10   */
11  public class T6ATester {
12
13      public static void main(String[] args) {
14          FinalT6A q1 = new FinalT6A(2,1);
15          q1.methodA();
16          FinalT6A q2 = new FinalT6A(3,5);
17          q2.methodA();
18          q1 = new FinalT6A(5,7);
19          q1.methodA();
20          q2.methodA();
21      }
22
23  }
```

FinalT6A.java



```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/C
4   */
5   package com.mycompany.t6atester;
6
7   /**
8    *
9    * @author ANIK
10   */
11   public class FinalT6A{
12       public static int temp = 4;
13       private int sum;
14       private int y = 1;
15       public FinalT6A(int x, int p){
16           temp+=1;
17           y = temp - p;
18           sum = temp + x;
19           System.out.println(x + " " + y+ " " + sum);
20       }
21       public void methodA(){
22           int x=0, y =0;
23           y = y + this.y;
24       }
25   }
```

Output:

Output - Run (T6ATester) ×

```
cd F:\sumaiya the V.I.P\sem 14\OOP\assignments\B\T6ATester; "JAVA_HOME=C:\\Program
Scanning for projects...

-----< com.mycompany:T6ATester >-----
Building T6ATester 1.0-SNAPSHOT
  from pom.xml
-----[ jar ]-----

--- resources:3.3.1:resources (default-resources) @ T6ATester ---
- skip non existing resourceDirectory F:\sumaiya the V.I.P\sem 14\OOP\assignments\B\I

--- compiler:3.11.0:compile (default-compile) @ T6ATester ---
- Changes detected - recompiling the module! :source
- Compiling 2 source files with javac [debug target 21] to target\classes

--- exec:3.1.0:exec (default-cli) @ T6ATester ---
  2 4 7
  3 1 9
  5 0 12

-----
BUILD SUCCESS
-----

Total time: 1.069 s
Finished at: 2024-06-22T21:14:10+06:00
-----
|
```