Lab Test 1

Object Oriented Programming Lab

Lab Test 1

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Department of CSE Summer'24

Course code: CSE 2104

Section: 01

University of Liberal Arts Bangladesh

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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

T6ATester.java FinalT6A.java

Source History

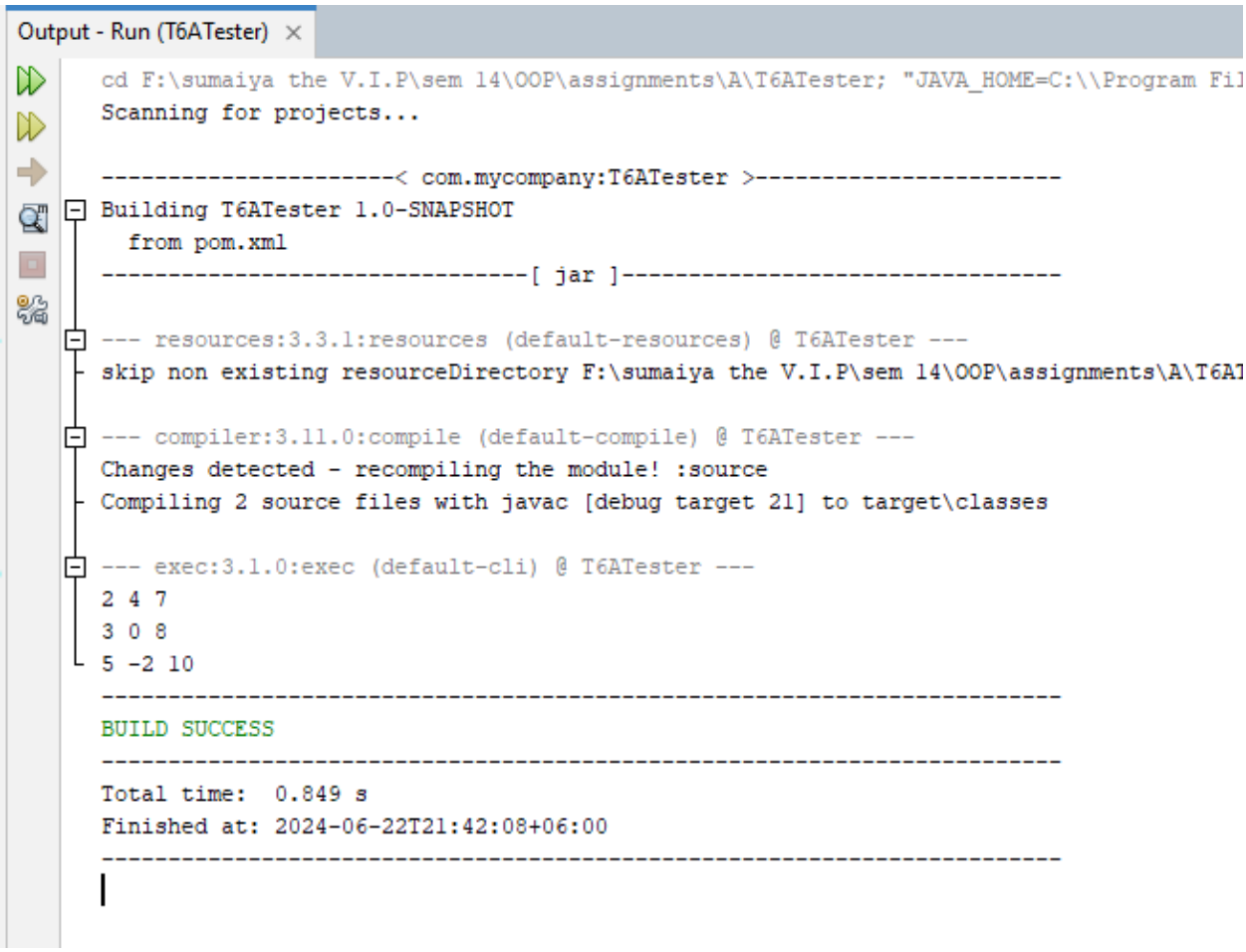
```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Lic
3   */
4
5  package com.mycompany.t6atester;
6
7  /**
8   *
9   * @author ANIK
10  */
11 public class T6ATester {
12   public static void main(String[] args)
13   {
14     FinalT6A q1 = new FinalT6A(2,1);
15     q1.methodA();
16     FinalT6A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

T6ATester.java | FinalT6A.java

Source | History

```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/License
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:



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

T6ATester.java × FinalT6A.java ×

Source History

```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licer
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 }
```

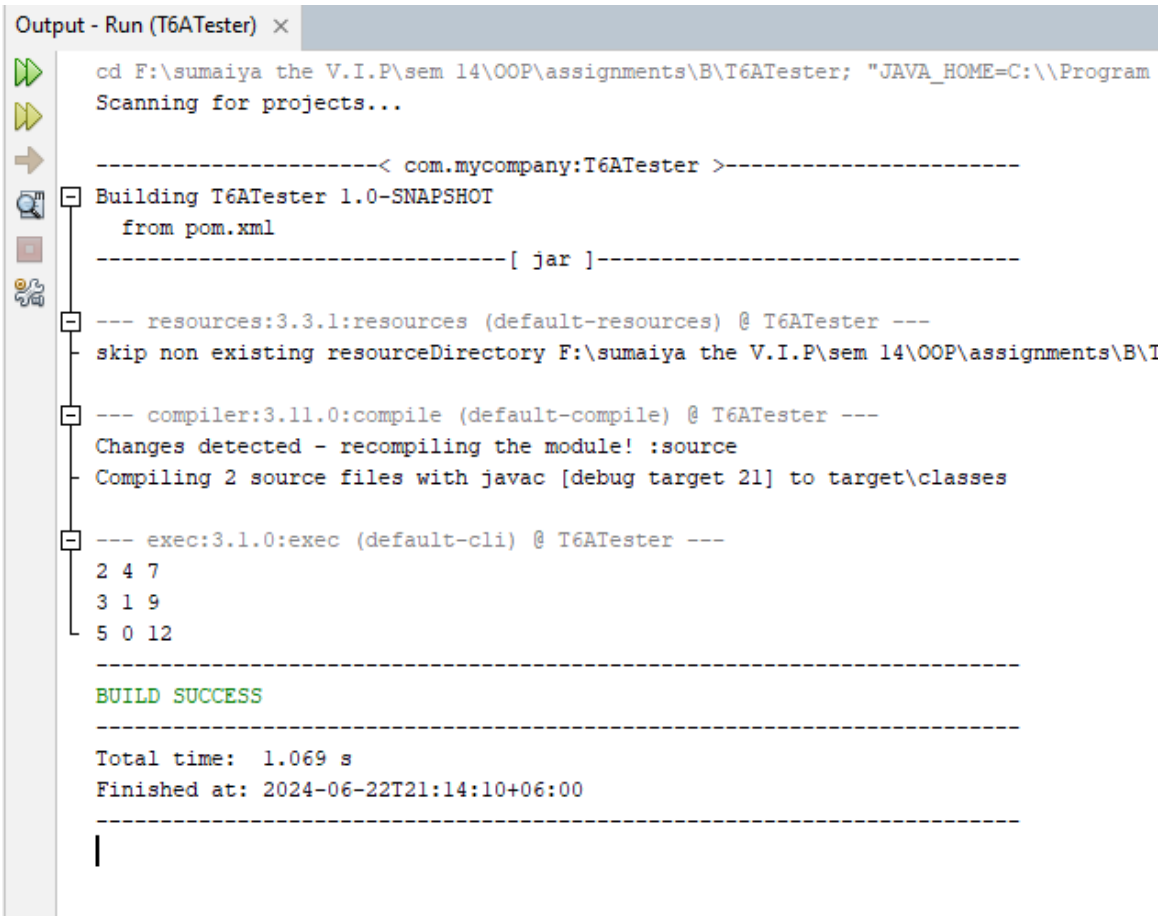
FinalT6A.java

T6ATester.java × FinalT6A.java ×

Source History

```
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
