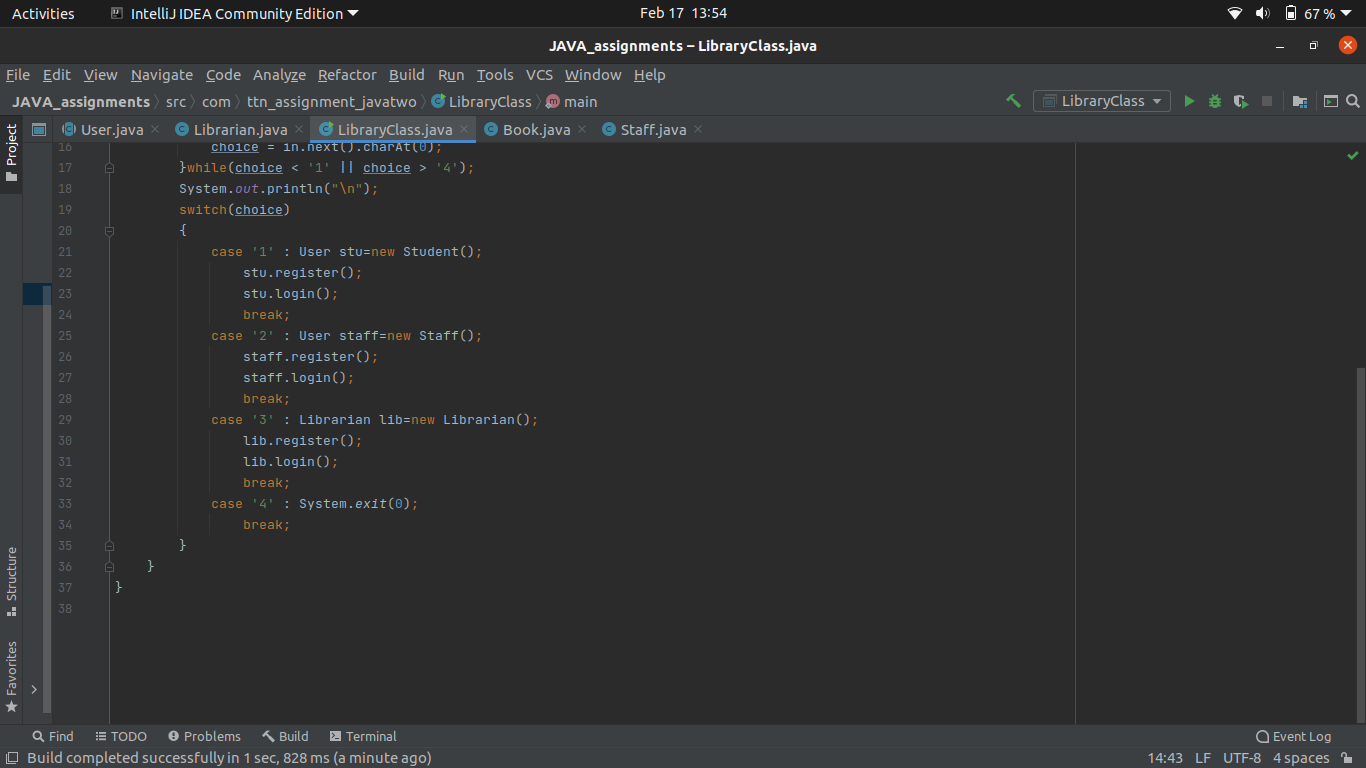
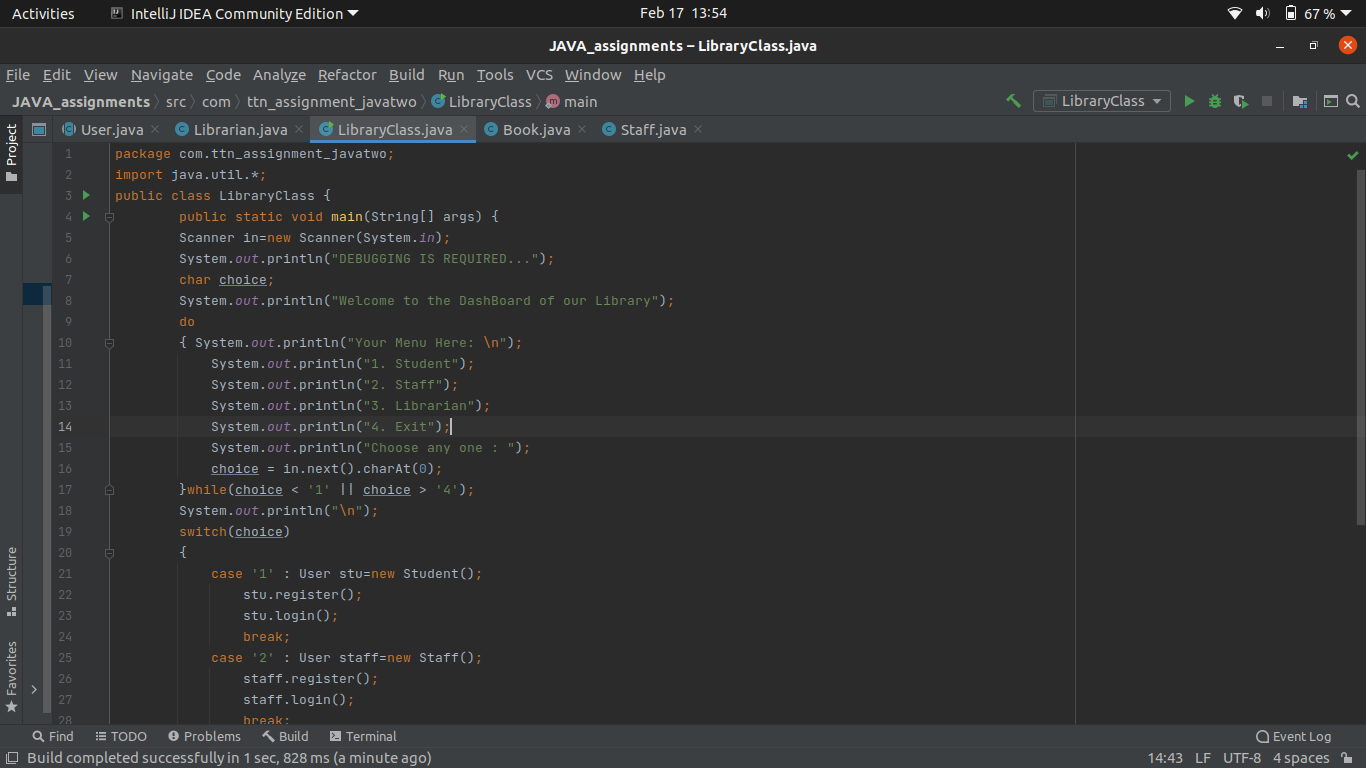
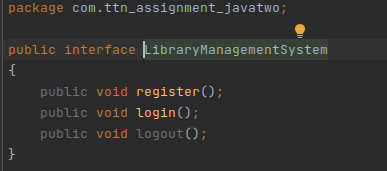
Intro to Java 2

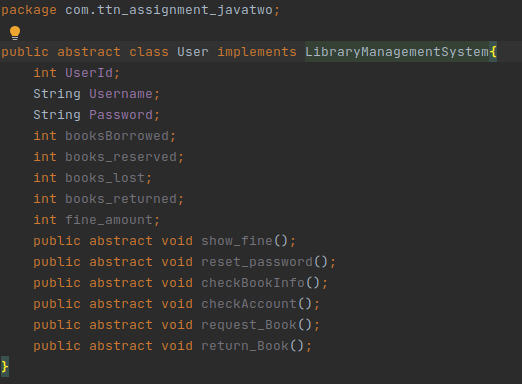
Q-1. Library class



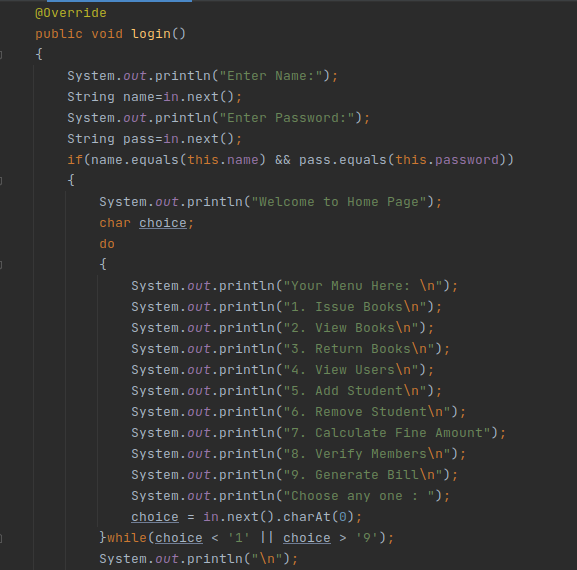
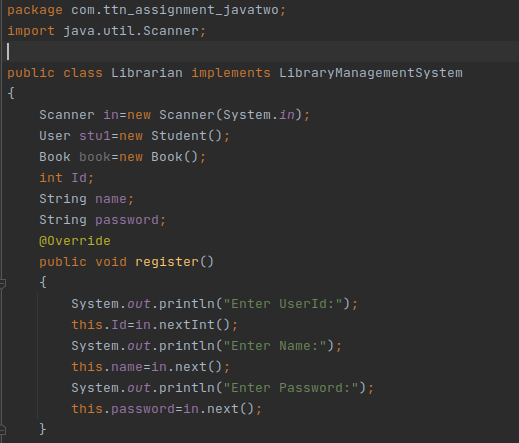
LibraryMS

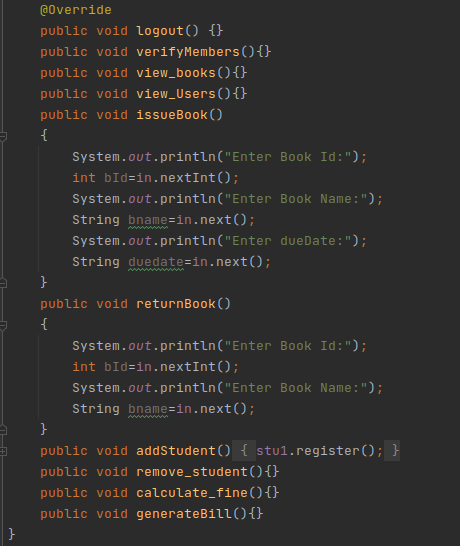


User:

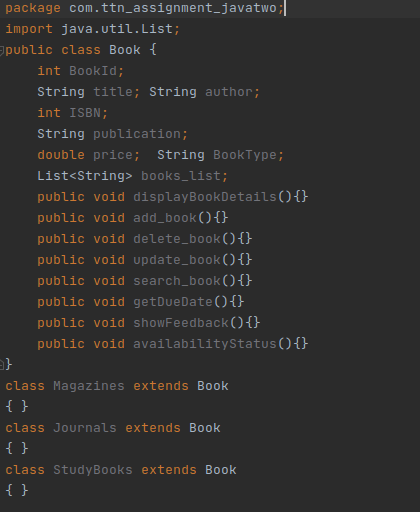


Librarian:

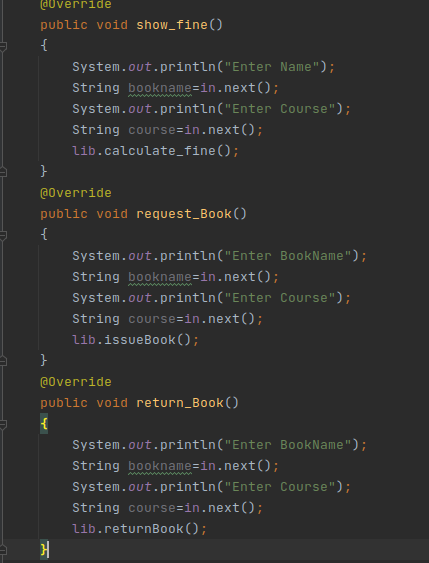
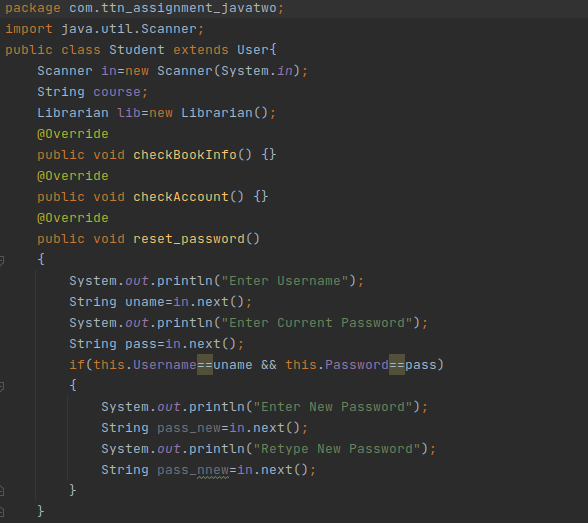




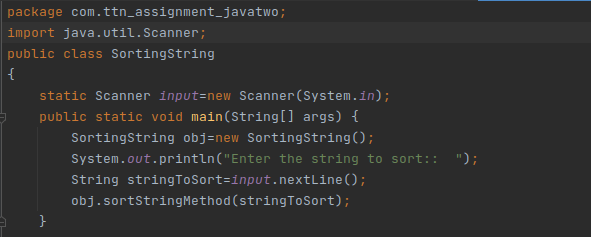
Book.java

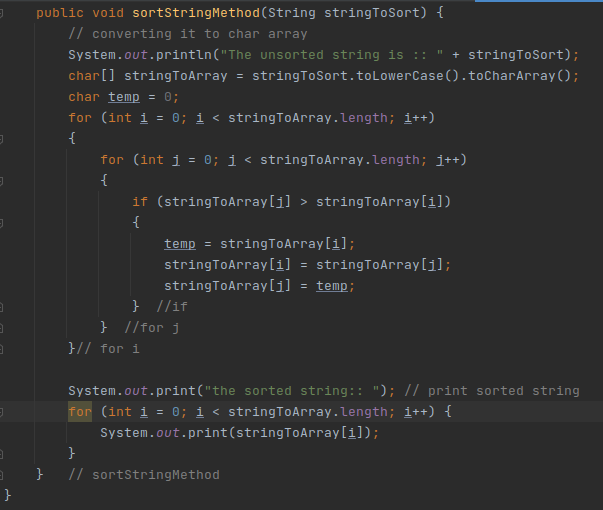


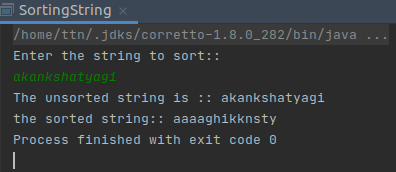
Student.java



Q-2 WAP to sorting string without using string Methods?.

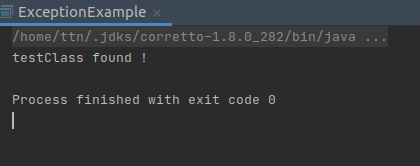
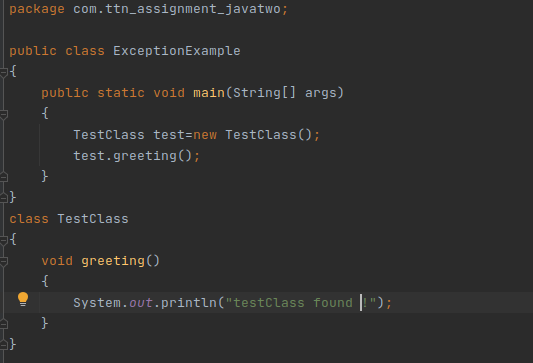




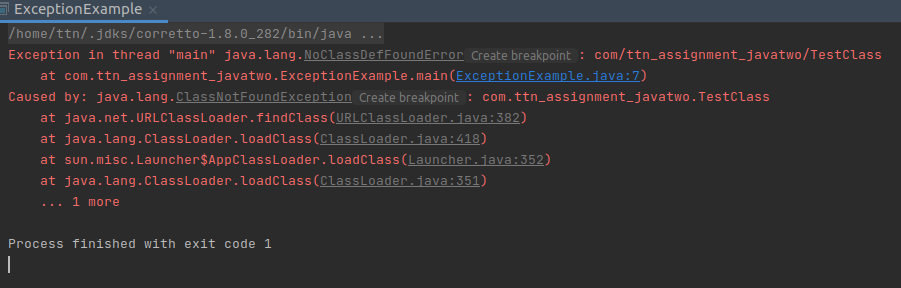
Output: 

Q-3

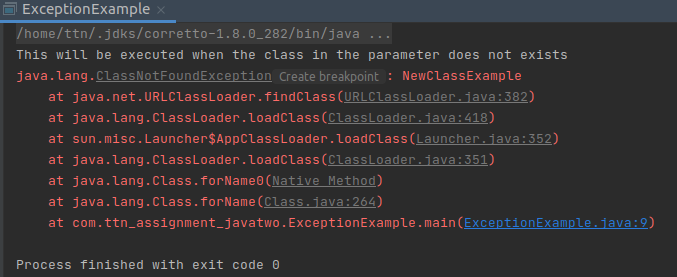
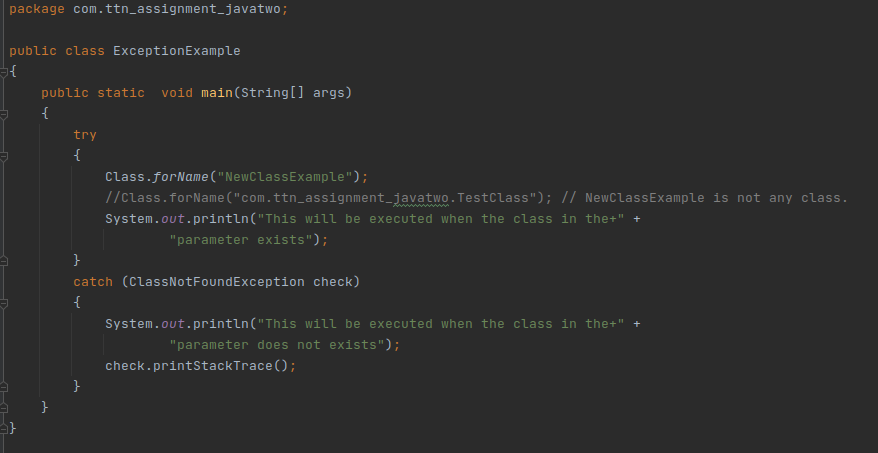
**//NoClassDefFoundError**

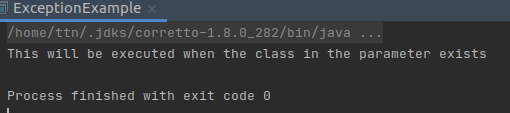
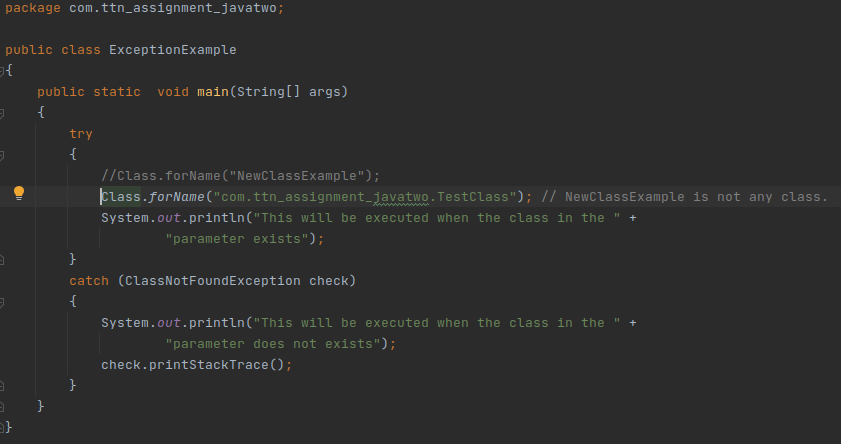


//now removing the .class file of TestClass.

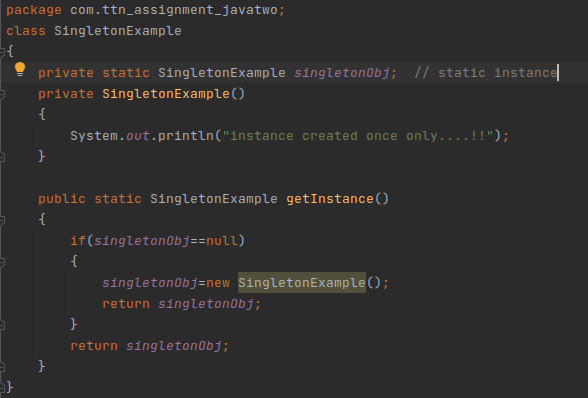


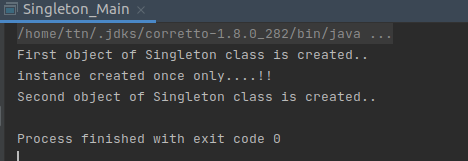
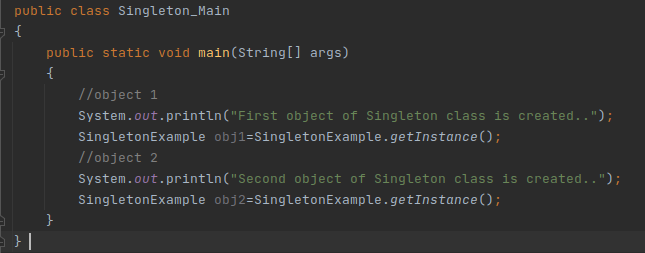
**//ClassNotFoundException**



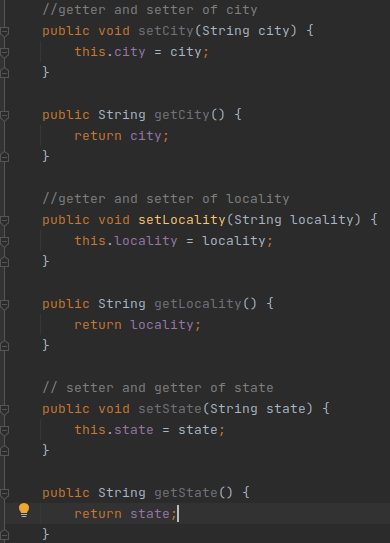
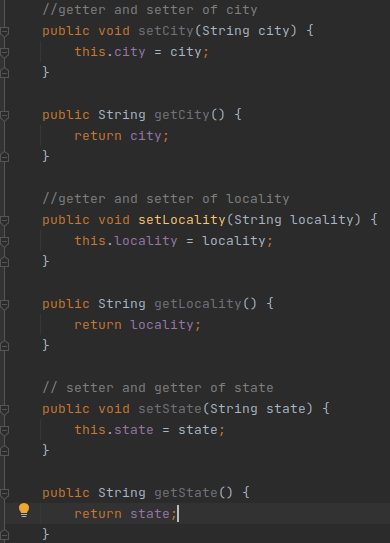
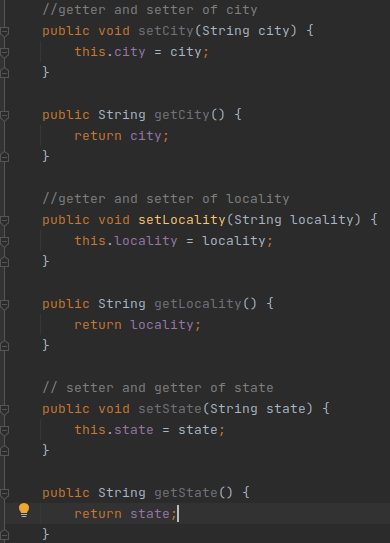
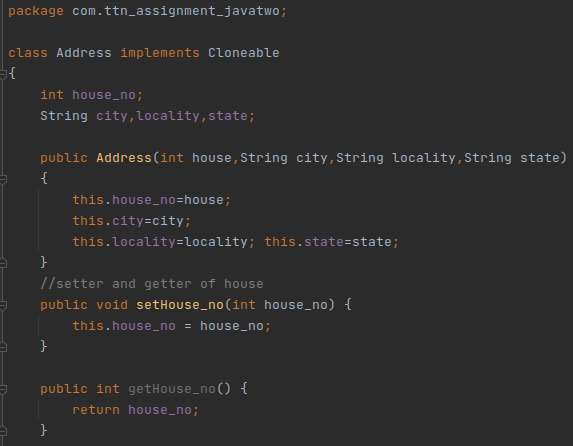
No exception 

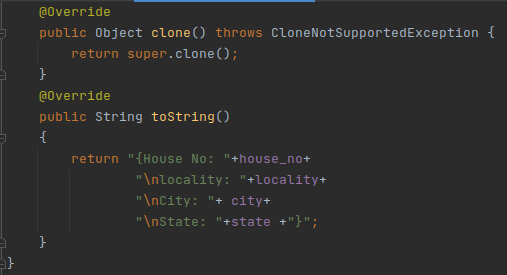
Q-4 WAP to create singleton class.

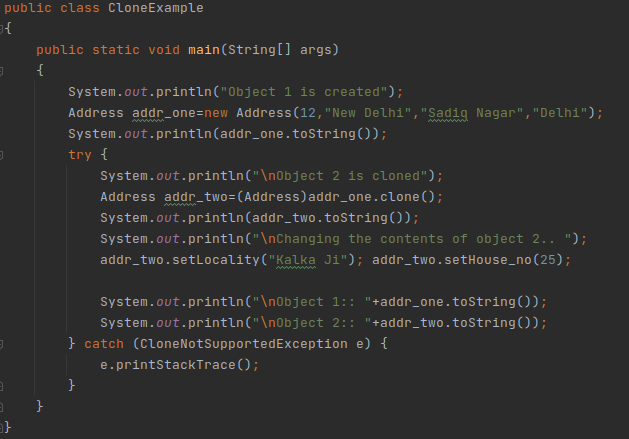


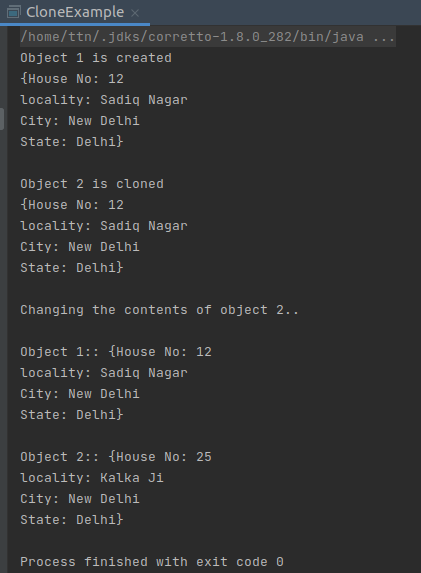


Q-5 WAP to show object cloning in java using cloneable and copy constructor both.

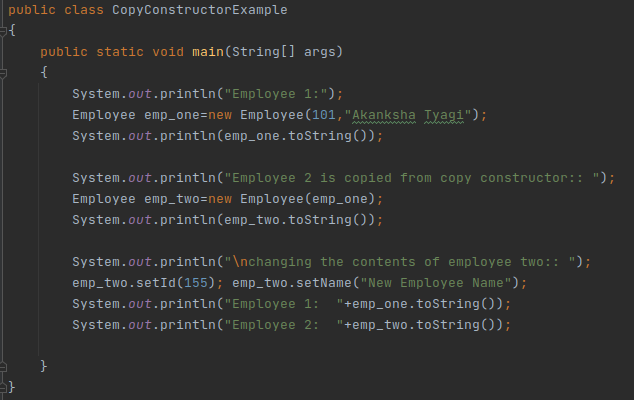
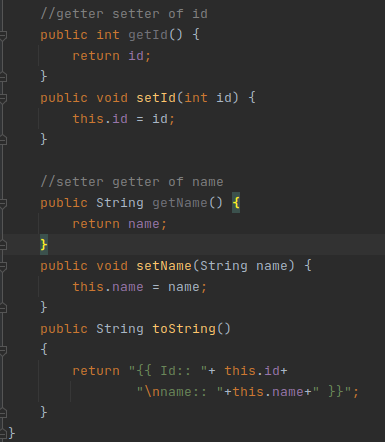
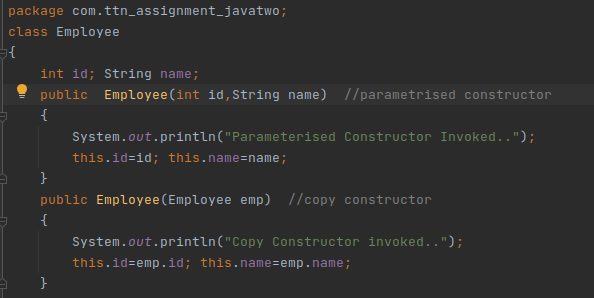
Cloning: 

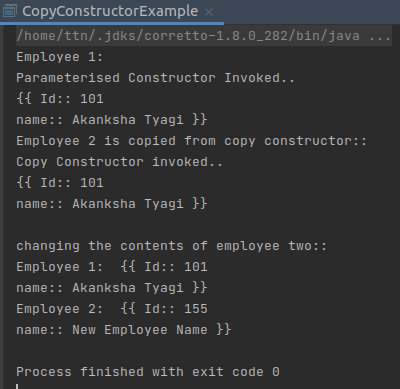


Main class

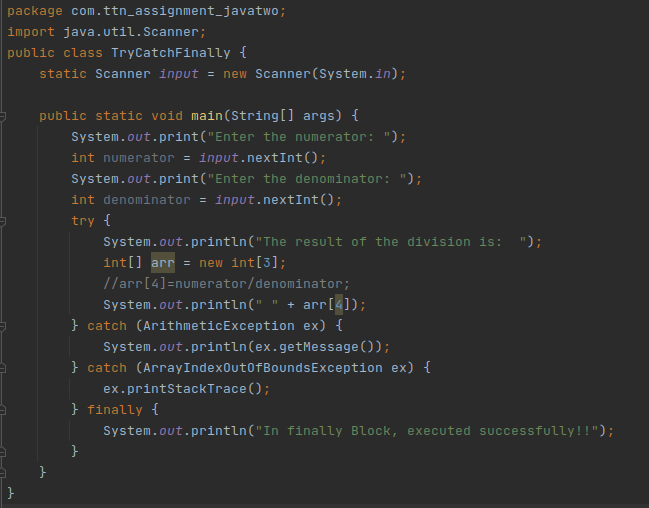
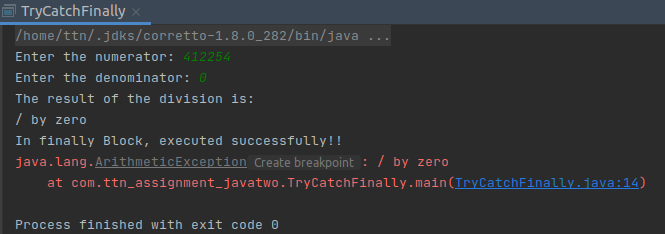
Output: 

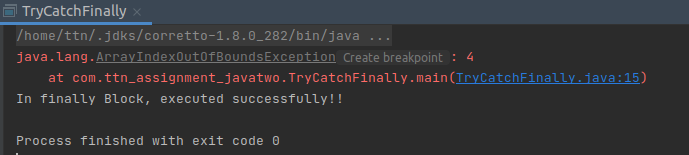
//\* by copy constructor \*//



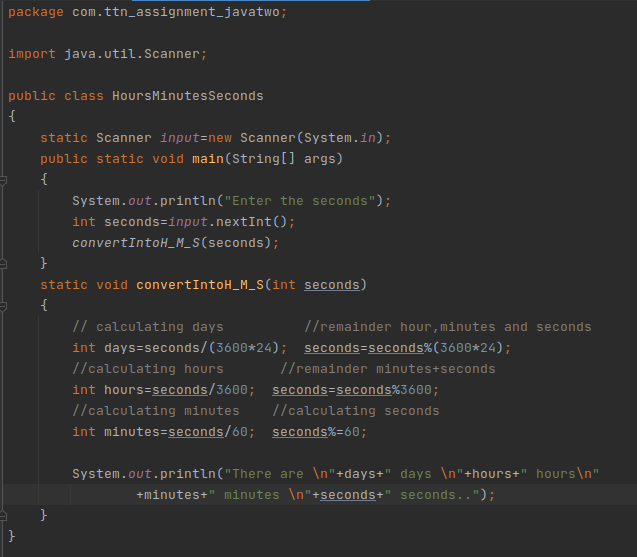
Output: 

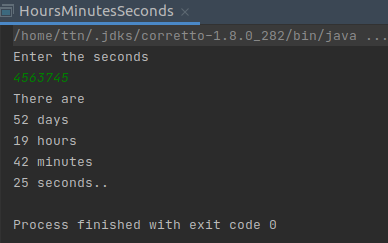
Q-6: WAP showing try, multi-catch and finally blocks.

Arithmetic exception: 

ArrayIndexOutOfBound: 

Q-7 WAP to convert seconds into days, hours, minutes and seconds.

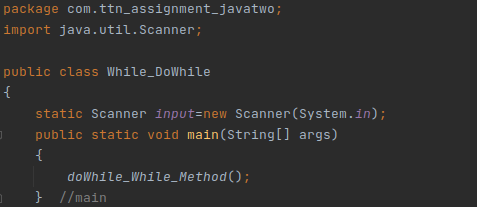


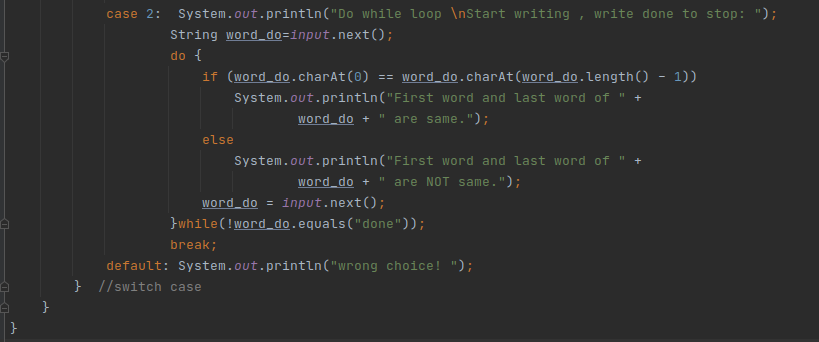
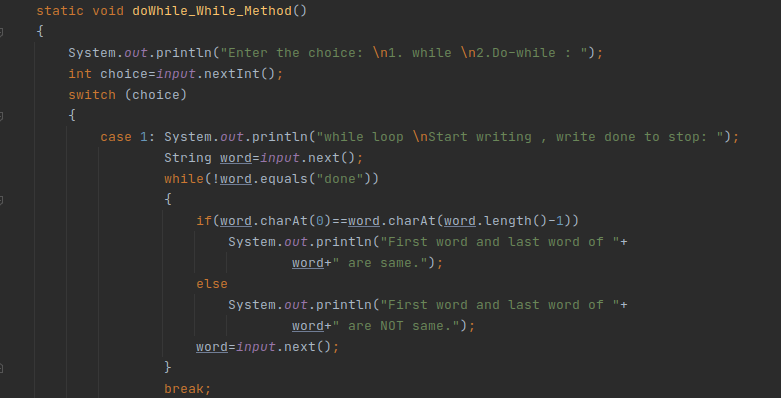


Q-8. WAP to read words from the keyboard until the word done is entered. For each word except done, report whether its first character is equal to its last character. For the required loop, use a

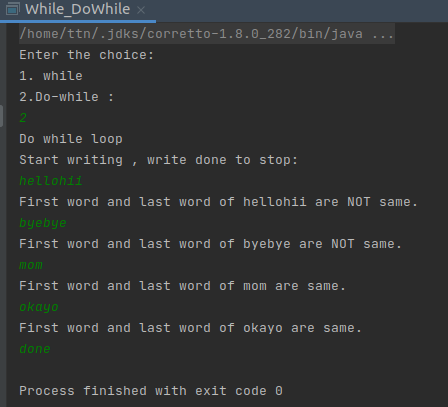
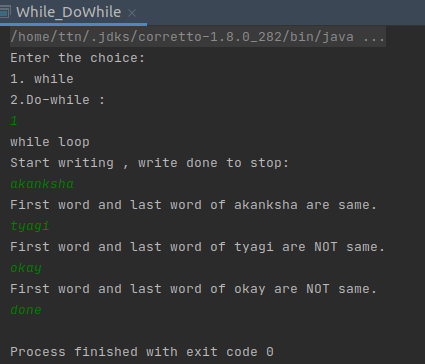
a)while statement

b)do-while statement



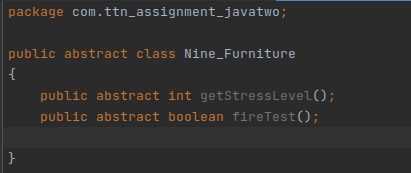


Output:

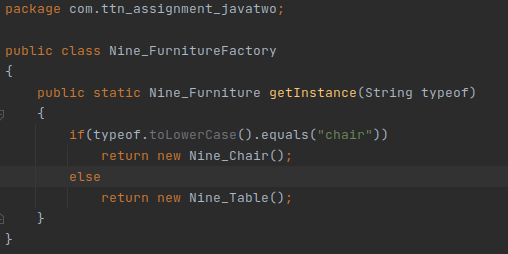


Q-9 Design classes having attributes for furniture where there are wooden chairs and tables, metal chairs and tables. There are stress and fire tests for each products.

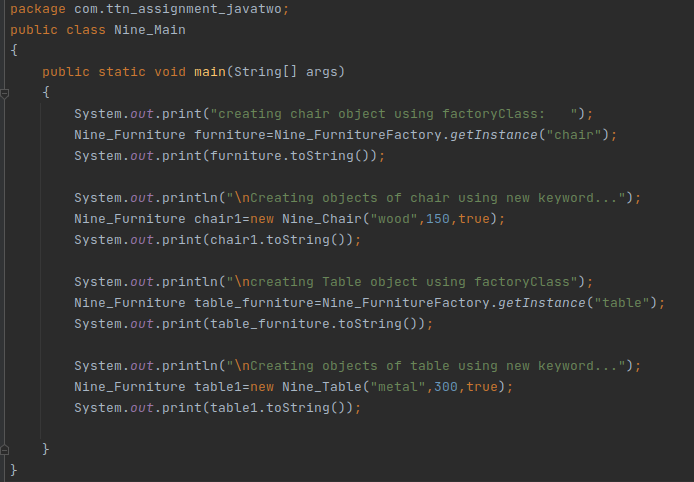
Nine\_Furniture.java:



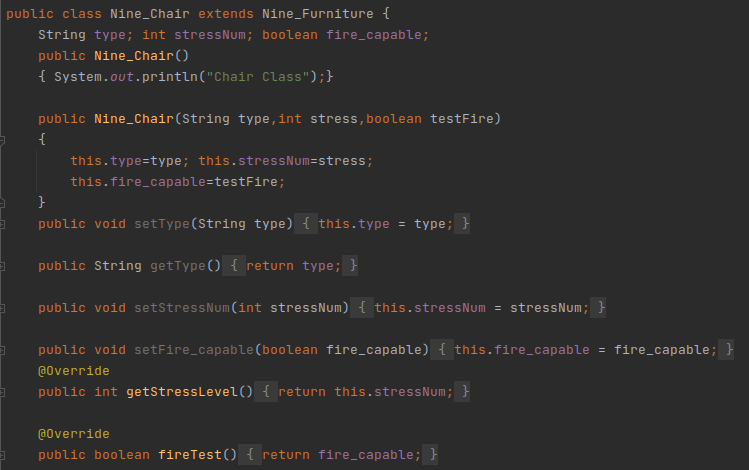
Nine\_Furniture\_Factory.java:

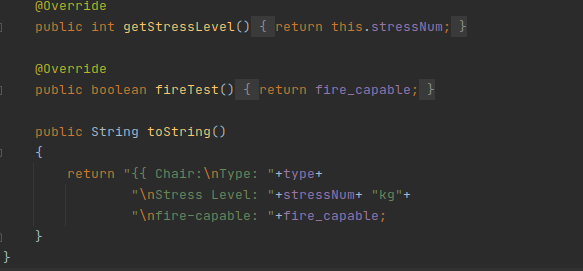


Nine\_main.java:

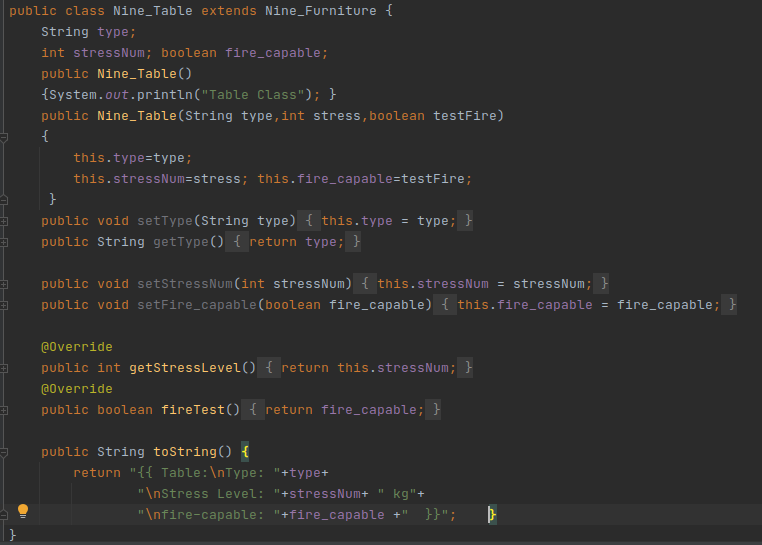


Nine\_chair.java :

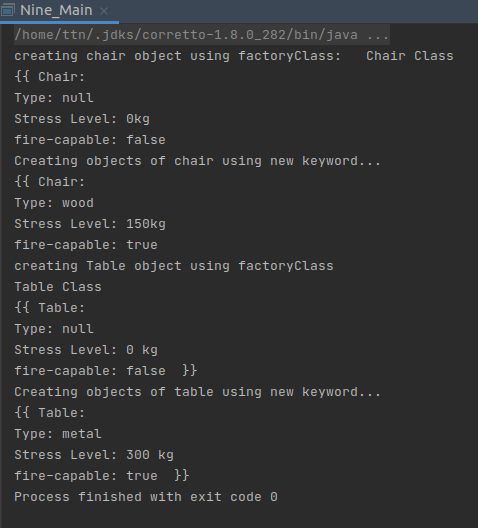




Nine\_Table.java



Output:



Question:

**Convert the following code so that it uses nested while statements instead of for statements:**

**int s = 0;**

**int t = 1;**

**for (int i = 0; i < 10; i++)**

**{**

**s = s + i;**

**for (int j = i; j > 0; j−−)**

**{**

**t = t \* (j - i);**

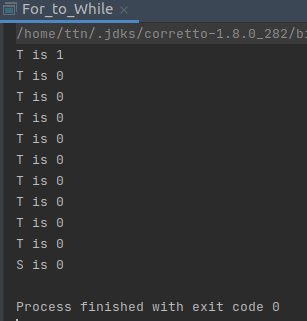
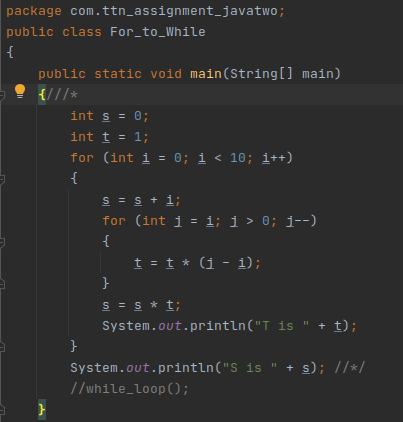
**}**

**s = s \* t;**

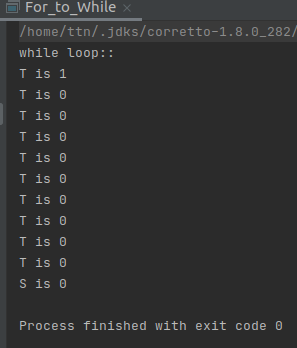
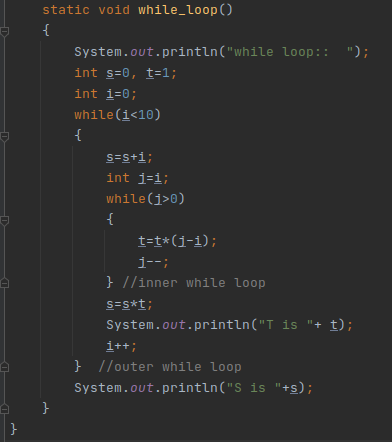
**System.out.println("T is " + t);**

**}**

**System.out.println("S is " + s);**

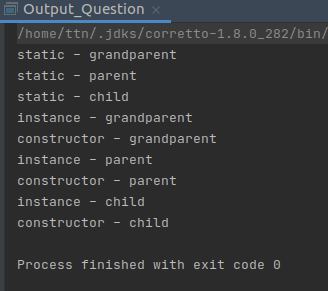
****

Using While loop

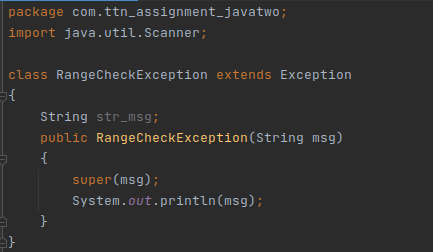


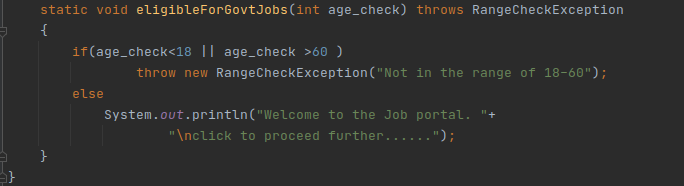
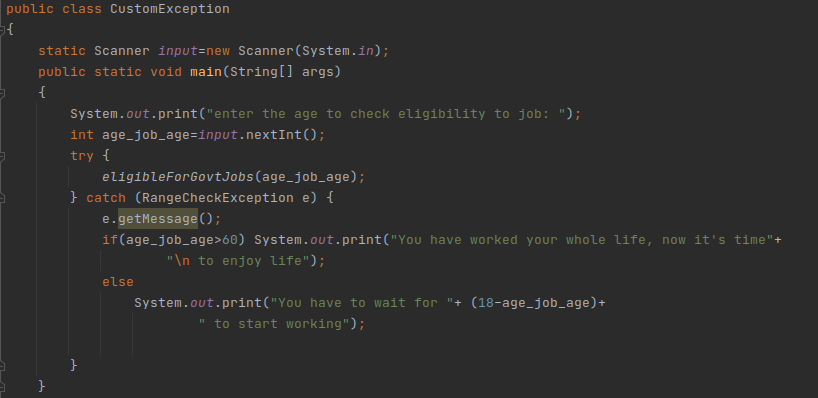
Question:. What will be the output on new Child(); ?

Parent p\_ref=new Child();



Question. Create a custom exception that does not have any stack trace.





Output: 