# *Helper.java*

```
import java.util.Scanner;

public class Helper {
  //Q1. Write a program to replace a substring inside a string with another string ?
  public void question1() {
     System.out.println("Q1. Write a program to replace a substring inside a string with another string ?");
     String s1 = "Hello World";
     System.out.println("The original sting is " + s1);
     String m = s1.replace("Hello", "Hi");
     System.out.println("the new string replaced by substring - hi is :" + m);
     System.out.println("");
     System.out.println("");
  }

  //Q2. Write a program to find the number of occurrences of the duplicate words in a string and print them ?
  public void question2() {
     System.out.println("Q2 Write a program to find the number of occurrences of the duplicate words in a string and print them ?");
     System.out.println("the input sting is :");
     String input = "Welcome to Java Session Session Session";
     System.out.println(input);
     String[] words = input.split(" ");
     int wrc = 1;

     for (int i = 0; i < words.length; i++) {
        for (int j = i + 1; j < words.length; j++) {

           if (words[i].equals(words[j])) {
              wrc = wrc + 1;
              words[j] = "0";
           }
        }
        if (!words[i].equals("0") && wrc > 1)
           System.out.println(words[i] + "--" + wrc);
        wrc = 1;

     }
     System.out.println("");
     System.out.println("");
  }
```

***//Q3. Write a program to find the number of occurrences of a character in a string without using loop?***

```
public void question3() {
    System.out.println("Q3. Write a program to find the number of occurrences of a character in a string without using loop?");
    System.out.println("Enter the string ");
    Scanner scanner = new Scanner(System.in);
    String str = scanner.next();
    char[] arr = str.toCharArray();
    System.out.println("Enter the character for which occurence is to be forund ");
    char a = scanner.next().charAt(0);
    int wc = 0;
    int wrc = count(a, 0, str, wc);
    System.out.println("The occurences of character '" + a + "' is :" + wrc);
    System.out.println("");
    System.out.println("");
}
int count(char a, int position, String str, int wrc) {
    int index = str.indexOf(a, position);
    if (index >= 0) {
        wrc++;
        return count(a, index + 1, str, wrc);
    } else
        return wrc;
}
```

***//Q4. Calculate the number & Percentage Of Lowercase Letters,Uppercase Letters, Digits And Other Special Characters In A String***

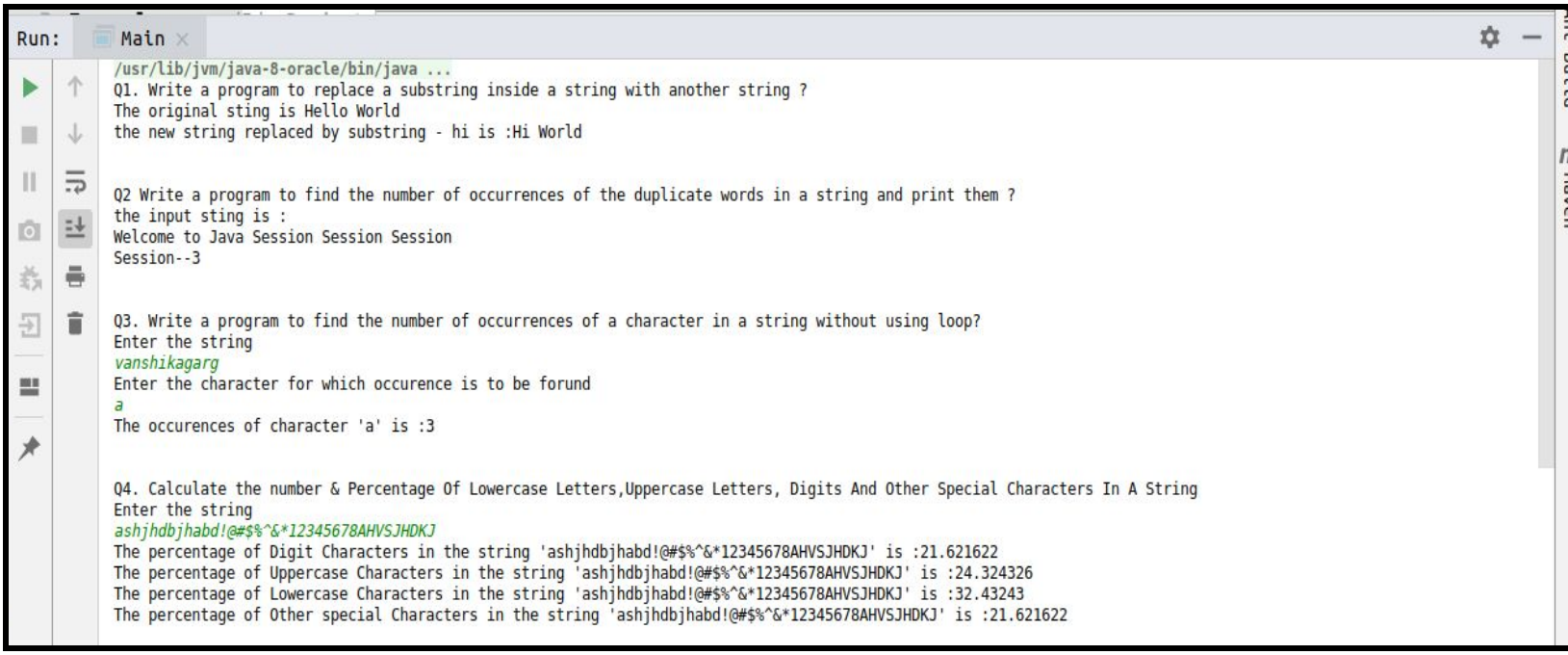
```
public void question4(){
    System.out.println("Q4. Calculate the number & Percentage Of Lowercase Letters,Uppercase Letters, Digits And Other Special Characters In A String");
    System.out.println("Enter the string ");
    Scanner scanner = new Scanner(System.in);
    String str = scanner.next();
    float u=0,l=0,d=0,s=0;
    for(int i=0;i<str.length();i++){
        if(Character.isDigit(str.charAt(i)))d++;
        else if(Character.isUpperCase(str.charAt(i)))u++;
        else if(Character.isLowerCase(str.charAt(i)))l++;
        else s++;
    }
    System.out.println("The percentage of Digit Characters in the string '"+str+"' is :"+d/str.length()*100);
    System.out.println("The percentage of Uppercase Characters in the string '"+str+"' is :"+u/str.length()*100);
    System.out.println("The percentage of Lowercase Characters in the string '"+str+"' is :"+l/str.length()*100);;
    System.out.println("The percentage of Other special Characters in the string '"+str+"' is :"+s/str.length()*100);
    System.out.println("");
    System.out.println("");
}
```

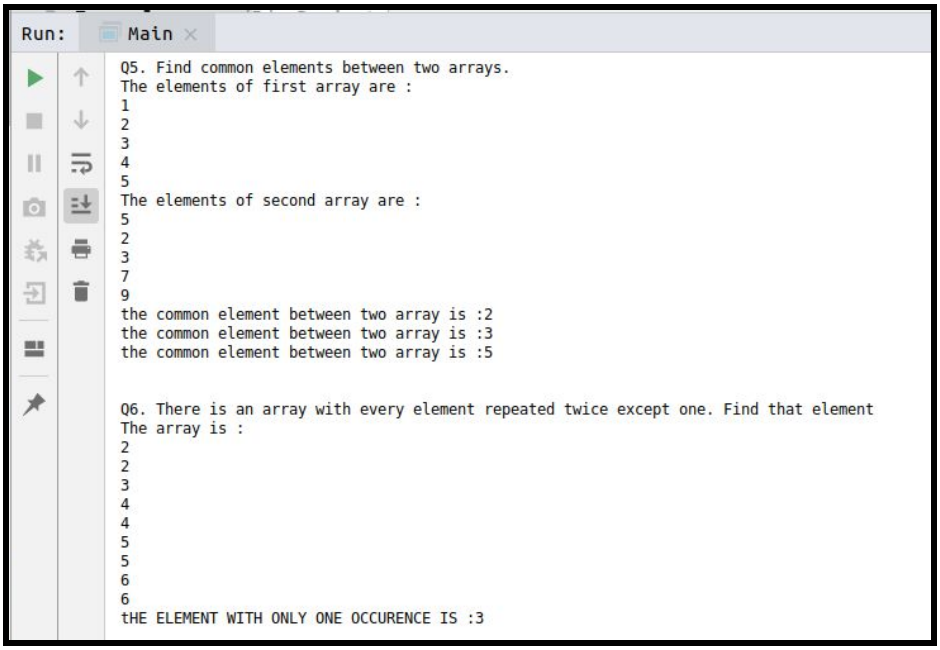
```
// Q5. Find common elements between two arrays.
public void question5(){
    System.out.println("Q5. Find common elements between two arrays.");
    Integer[] a=new Integer[]{1,2,3,4,5};
    Integer[] b=new Integer[]{5,2,3,7,9};
    System.out.println("The elements of first array are :");
    for(int i=0;i<a.length;i++) System.out.println(a[i]);
    System.out.println("The elements of second array are :");
    for(int i=0;i<a.length;i++) System.out.println(b[i]);
    for(int i=0;i<a.length;i++){
        for(int j=0;j<b.length;j++){
            if(a[i].equals(b[j])){
                System.out.println("the common element between two array is :"+a[i]);
            }

        }
    }
    System.out.println("");
    System.out.println("");
}
```

```
// Q6. There is an array with every element repeated twice except one. Find that element
public void question6(){
    System.out.println("Q6. There is an array with every element repeated twice except one. Find that element");
    Integer[] arr = new Integer[]{2,2,3,4,4,5,5,6,6};
    System.out.println("The array is :");
    for (int i=0;i<arr.length;i++) System.out.println(arr[i]);
    int wrc=1;
    for (int i = 0; i < arr.length; i++) {
        for (int j = i + 1; j < arr.length; j++) {

            if (arr[i].equals(arr[j])) {
                wrc = wrc + 1;
                arr[j] =0;
            }
        }
        if (arr[i]!=0 && wrc == 1)
            System.out.println("tHE ELEMENT WITH ONLY ONE OCCURENCE IS :"+ arr[i]);
        wrc = 1;
    }
    System.out.println("");
    System.out.println("");
}

}
```

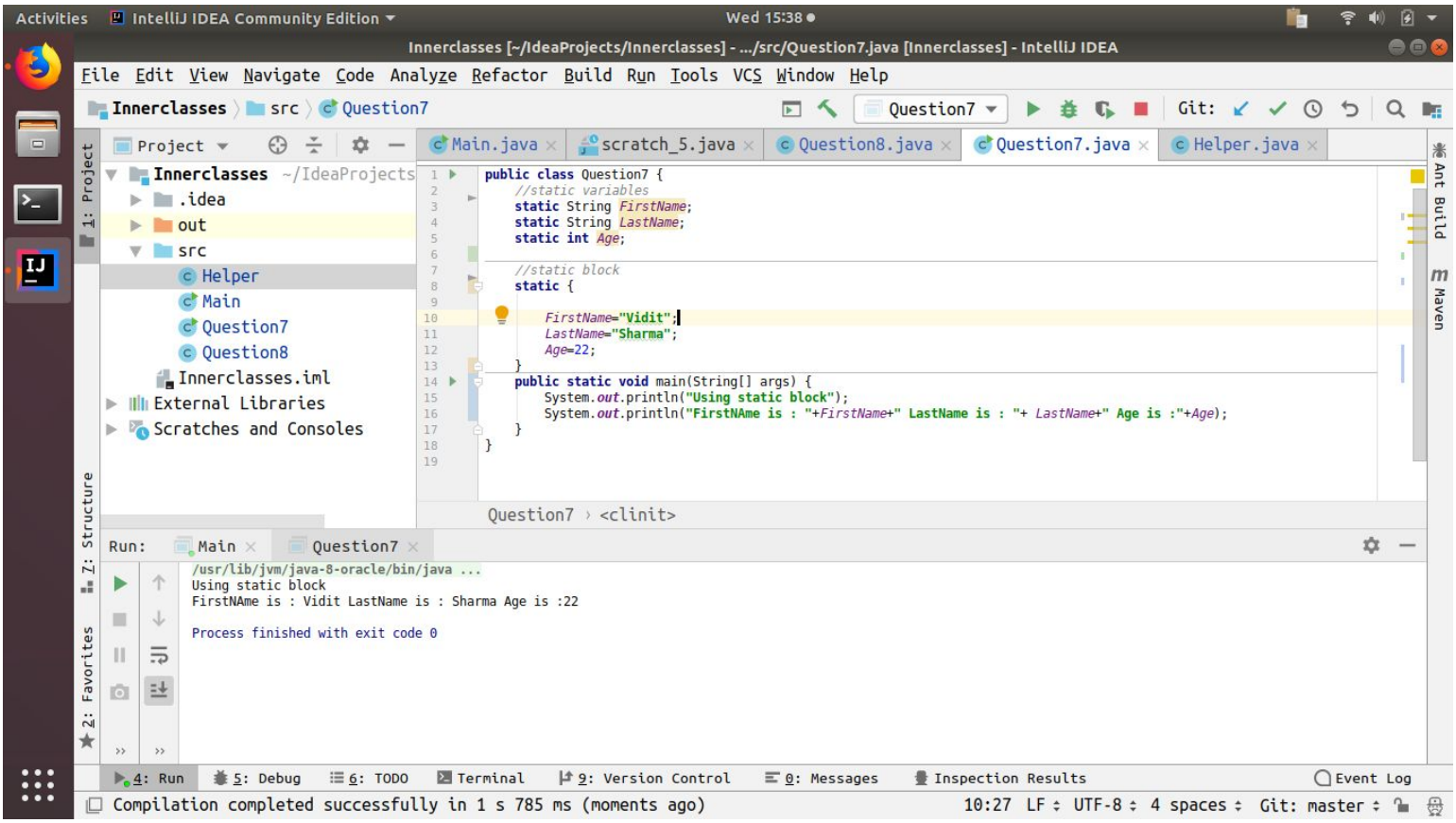
## *Main.java*

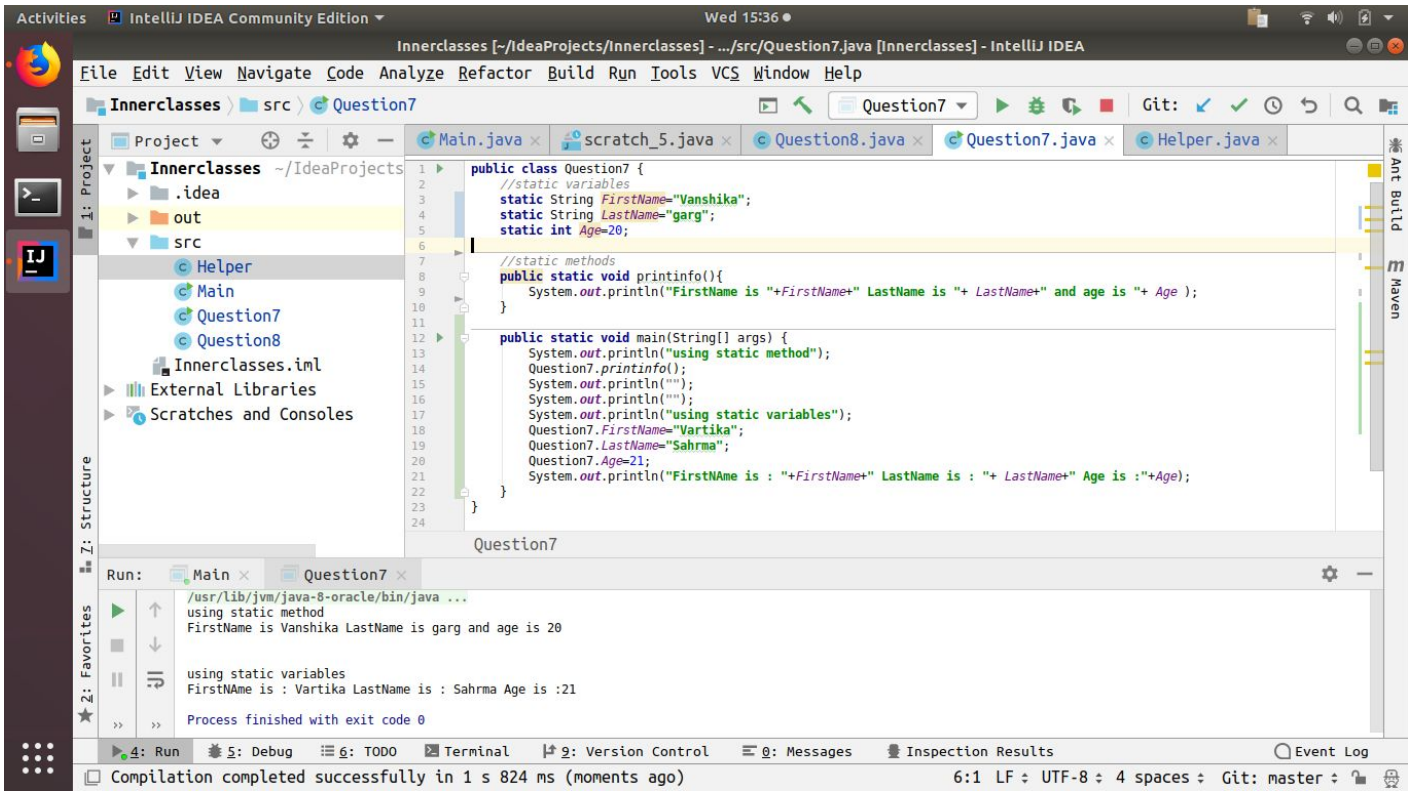
```
public class Main {
  public static void main(String[] args) {
     Helper helper =new Helper();
     helper.question1();
     helper.question2();
     helper.question3();
     helper.question4();
     helper.question5();
     helper.question6();
  }

}
```



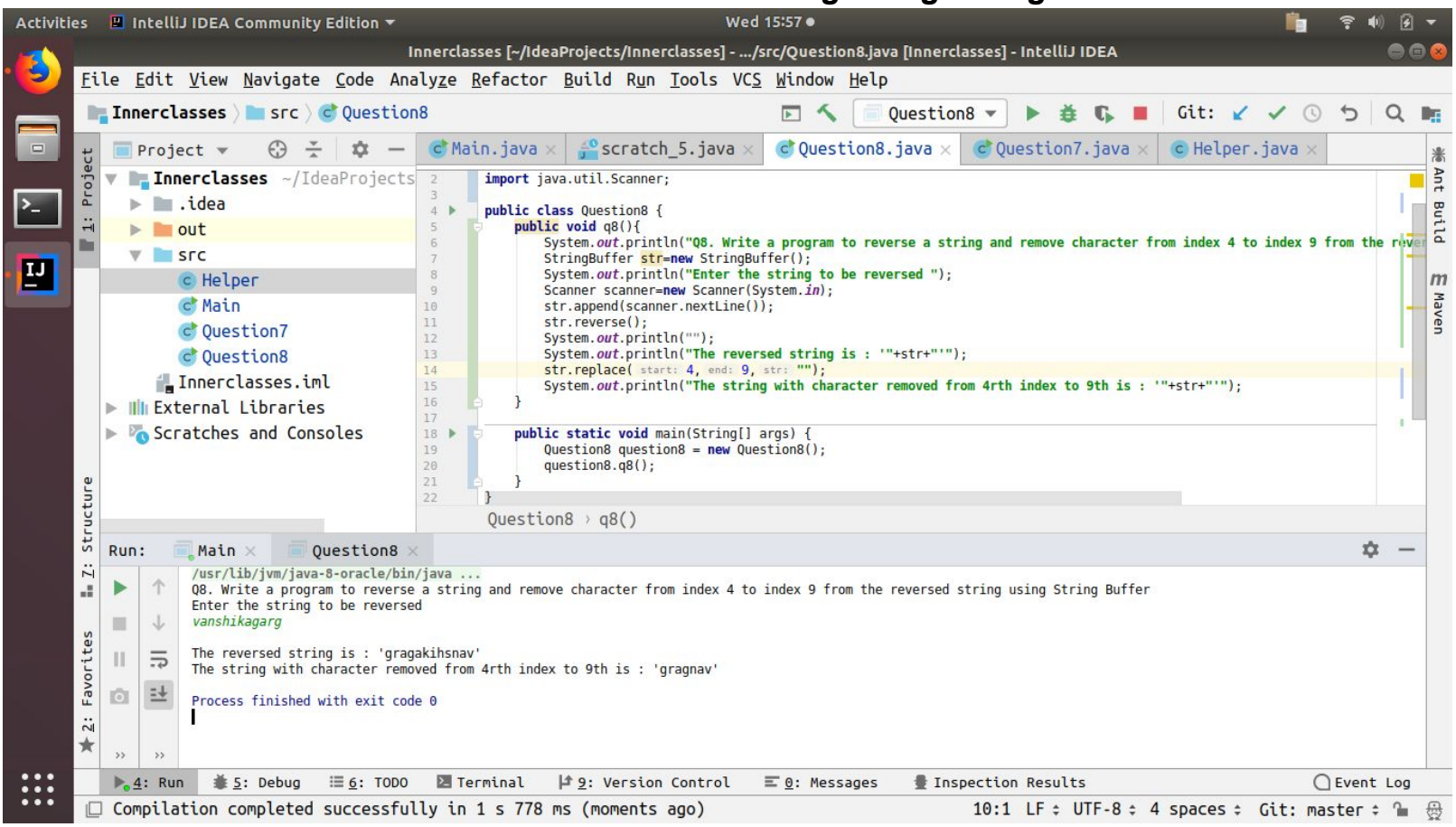



***Q7. Write a program to print your Firstname,LastName & age using static block,static method & static variable respectively***

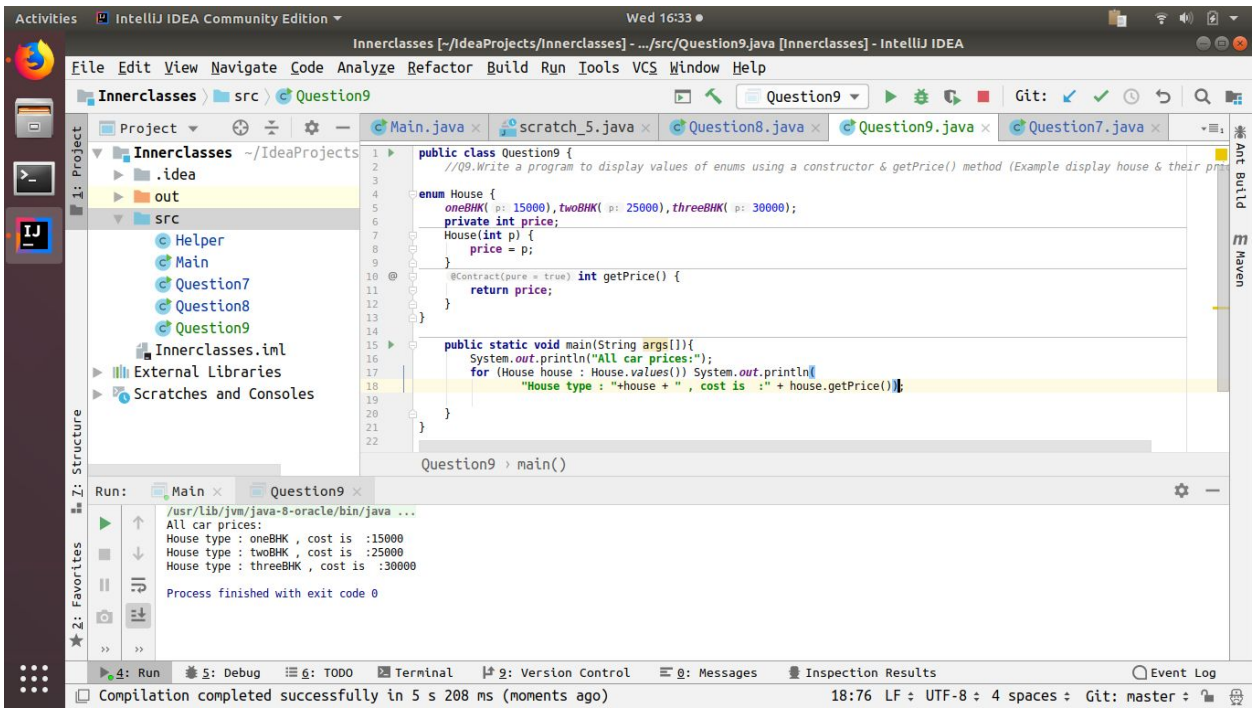


***Q8. Write a program to reverse a string and remove character from index 4 to index 9 from the reversed string using String Buffer***




***Q9.Write a program to display values of enums using a constructor & getPrice() method (Example display house & their prices)***



***Q10.Write a single program for following operation using overloading***

***A) Adding 2 integer number***

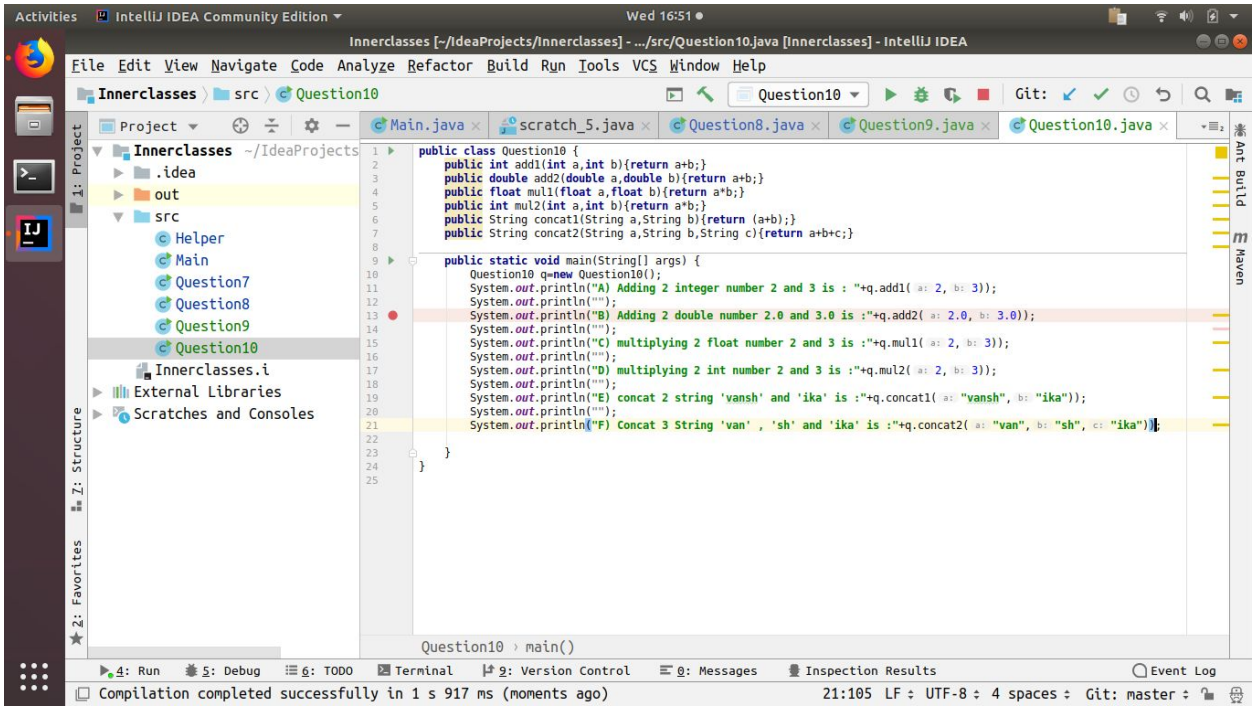
***B) Adding 2 double***

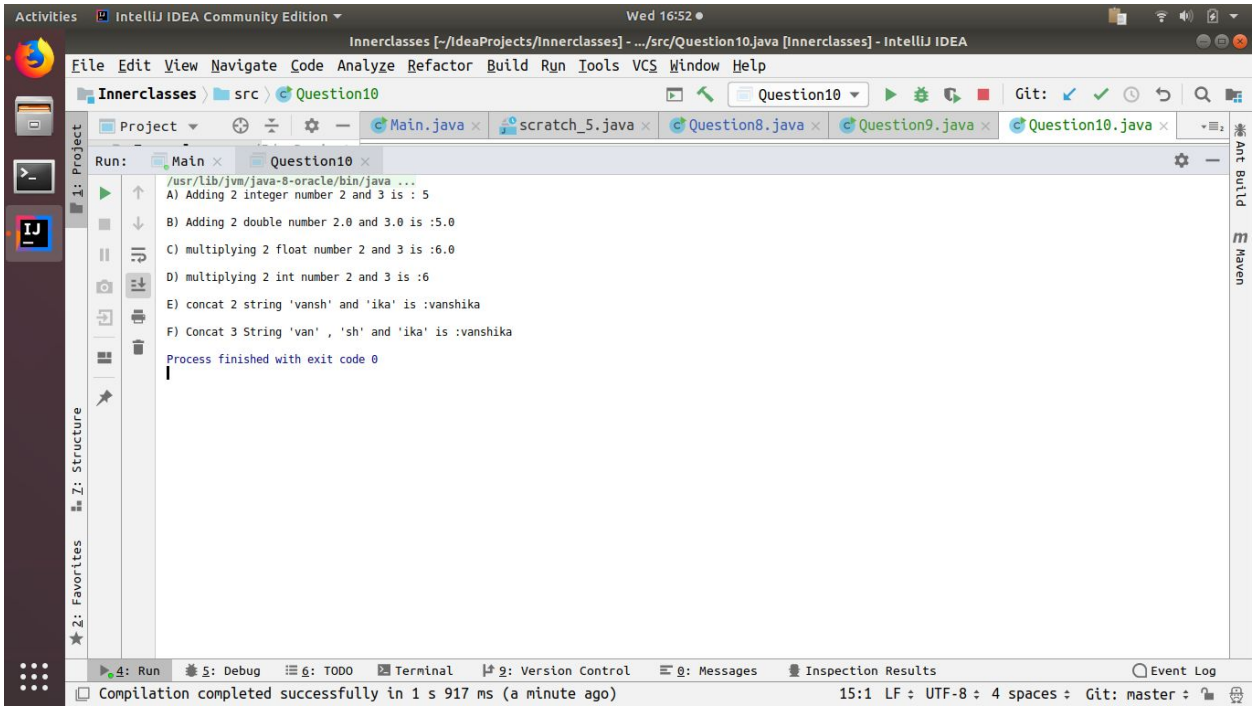
***C) multiplying 2 float***

***D) multiplying 2 int***

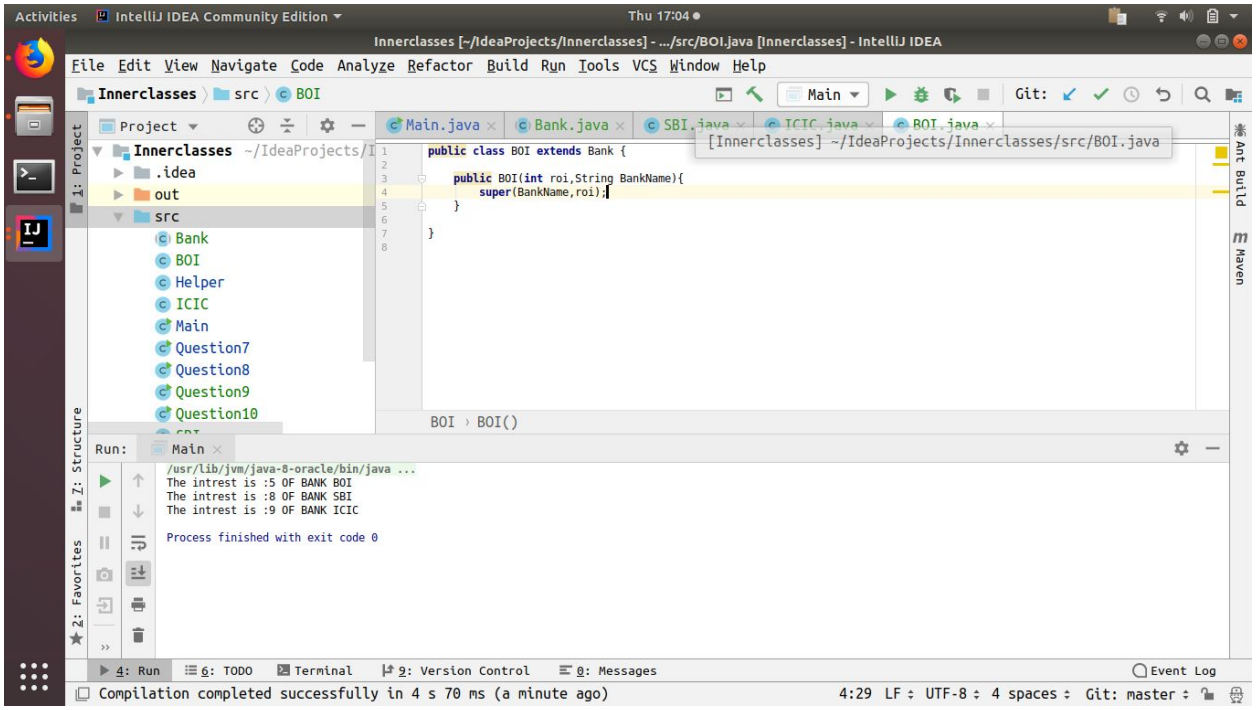
***E) concat 2 string***

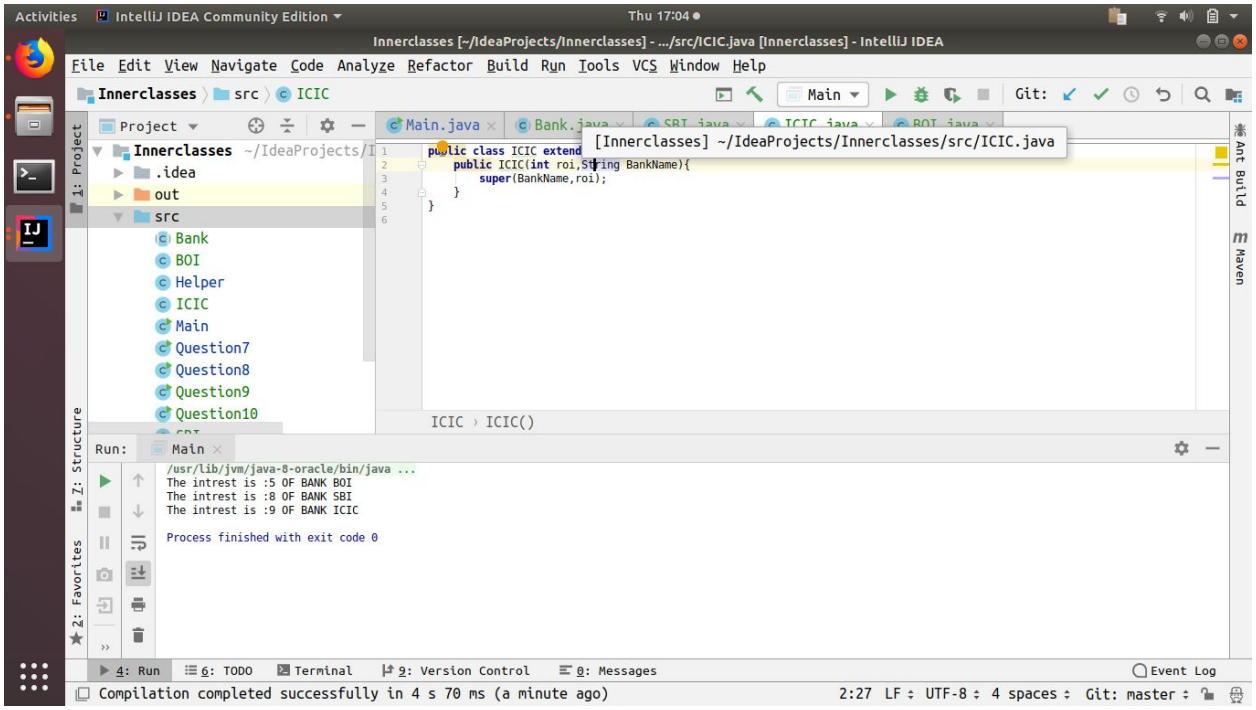
***F) Concat 3 String***

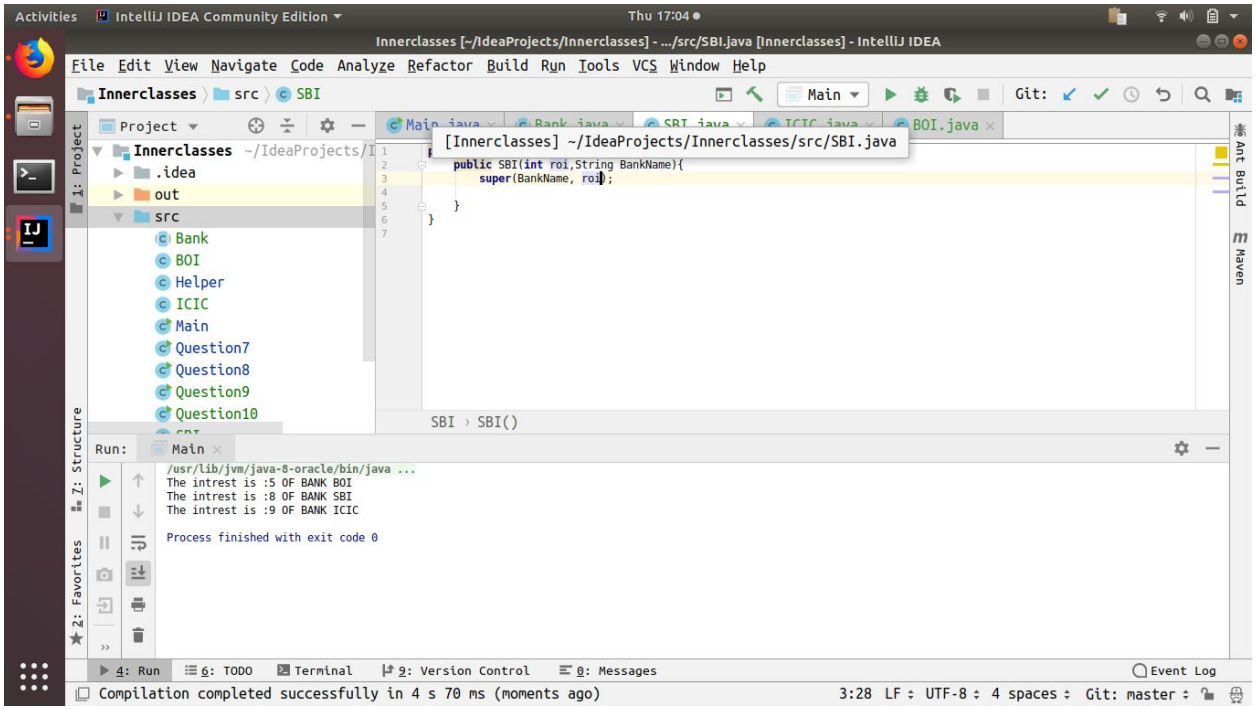


***Q11.Create 3 subclass of bank SBI,BOI,ICICI all 4 should have method called getDetails which provide there specific details like rate of interest etc,print details of every banks***




Activities
IntelliJ IDEA Community Edition
Thu 17:04
Innerclasses [~/IdeaProjects/Innerclasses] - .../src/SBI.java [Innerclasses] - IntelliJ IDEA
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
Innerclasses src SBI
Main
Git:
Project
Main.java
Bank.java
SBI.java
ICIC.java
BOI.java
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Innerclasses ~/IdeaProjects/I
.idea
out
src
Bank
BOI
Helper
ICIC
Main
Question7
Question8
Question9
Question10
public SBI(int roi,String BankName){
super(BankName, roi);
}
}
SBI › SBI()
Run:
Main
/usr/lib/jvm/java-8-oracle/bin/java ...
The intrest is :5 OF BANK BOI
The intrest is :8 OF BANK SBI
The intrest is :9 OF BANK ICIC
Process finished with exit code 0
4: Run
6: TODO
Terminal
9: Version Control
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Compilation completed successfully in 4 s 70 ms (moments ago)
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1: Project
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7: Structure
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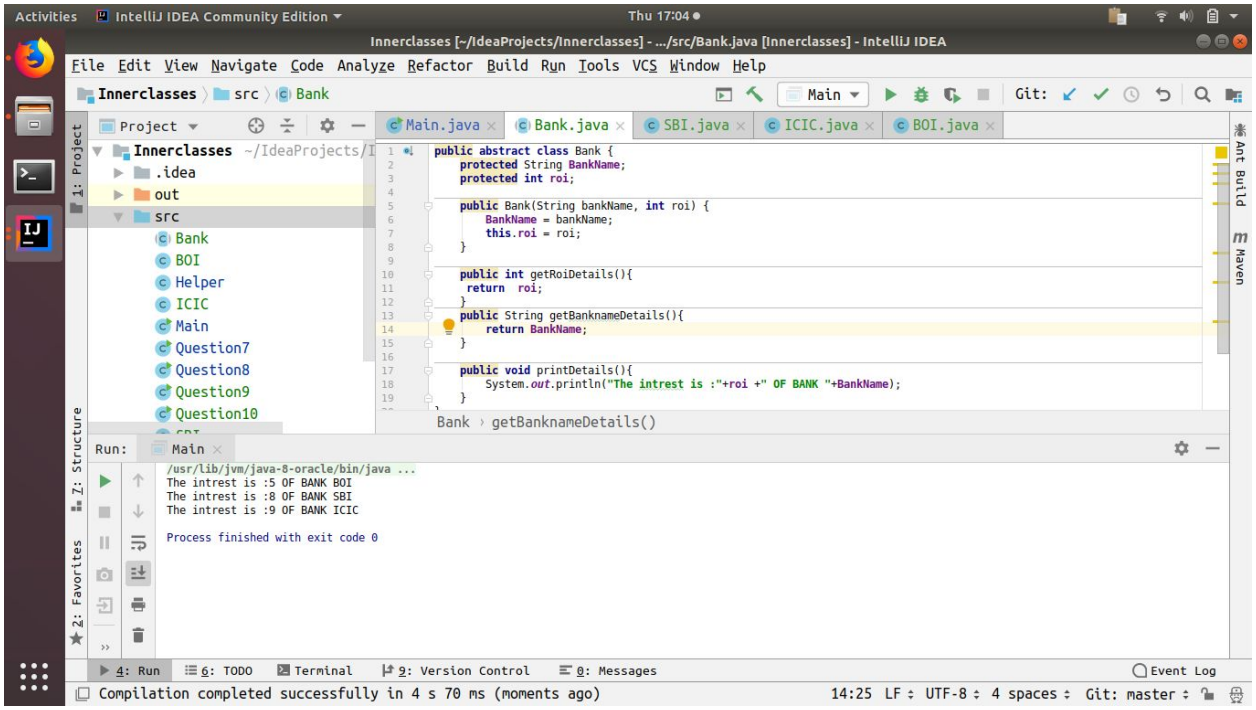
Activities
IntelliJ IDEA Community Edition
Thu 17:04
Innerclasses [~/IdeaProjects/Innerclasses] - .../src/Bank.java [Innerclasses] - IntelliJ IDEA
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
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BOI.java
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Bank
BOI
Helper
ICIC
Main
Question7
Question8
Question9
Question10
public abstract class Bank {
protected String BankName;
protected int roi;
public Bank(String bankName, int roi) {
BankName = bankName;
this.roi = roi;
}
public int getRoiDetails(){
return roi;
}
public String getBanknameDetails(){
return BankName;
}
public void printDetails(){
System.out.println("The intrest is :"+roi +" OF BANK "+BankName);
}
Bank › getBanknameDetails()
Run:
Main
/usr/lib/jvm/java-8-oracle/bin/java ...
The intrest is :5 OF BANK BOI
The intrest is :8 OF BANK SBI
The intrest is :9 OF BANK ICIC
Process finished with exit code 0
4: Run
6: TODO
Terminal
9: Version Control
0: Messages
Event Log
Compilation completed successfully in 4 s 70 ms (moments ago)
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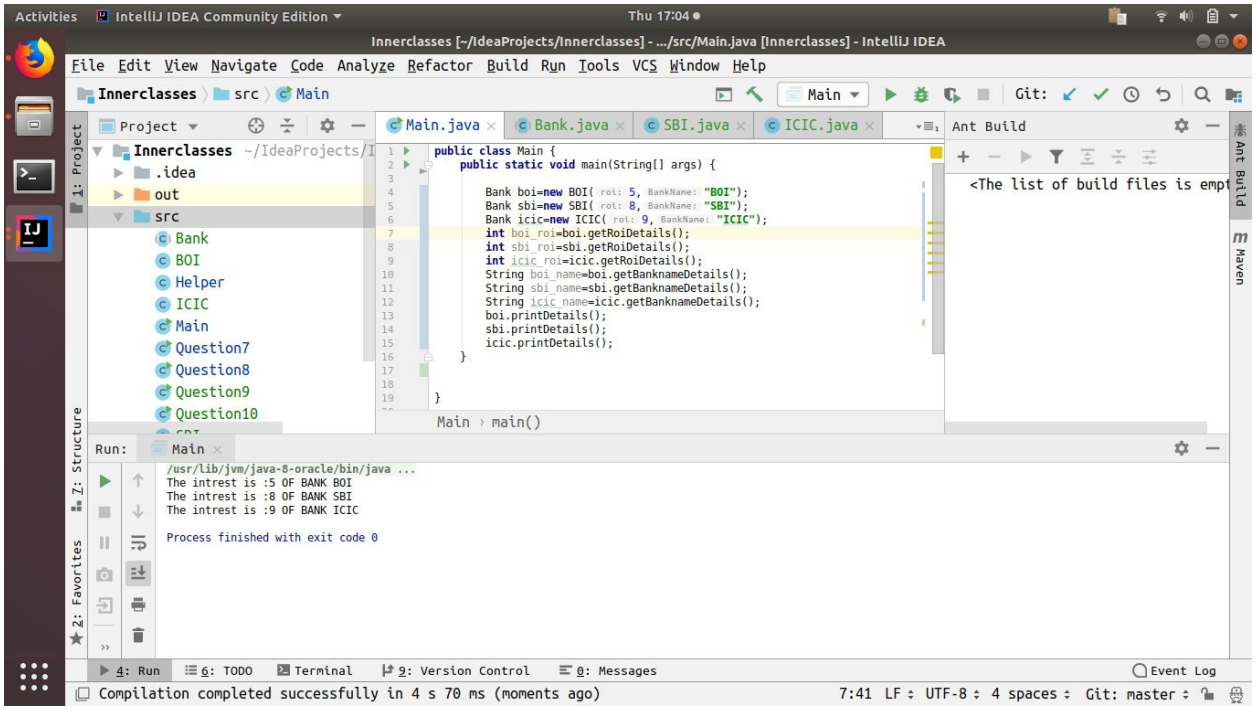
Ant Build
Maven
1: Project
2: Favorites
7: Structure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Thu 17:04
Innerclasses [~/IdeaProjects/Innerclasses] - .../src/Main.java [Innerclasses] - IntelliJ IDEA
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
Innerclasses src Main
Main
Git:
Project
Main.java
Bank.java
SBI.java
ICIC.java
Ant Build
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Innerclasses ~/IdeaProjects/I
.idea
out
src
Bank
BOI
Helper
ICIC
Main
Question7
Question8
Question9
Question10
public class Main {
public static void main(String[] args) {
Bank boi=new BOI( roi: 5, BankName: "BOI");
Bank sbi=new SBI( roi: 8, BankName: "SBI");
Bank icic=new ICIC( roi: 9, BankName: "ICIC");
int boi_roi=boi.getRoiDetails();
int sbi_roi=sbi.getRoiDetails();
int icic_roi=icic.getRoiDetails();
String boi_name=boi.getBanknameDetails();
String sbi_name=sbi.getBanknameDetails();
String icic_name=icic.getBanknameDetails();
boi.printDetails();
sbi.printDetails();
icic.printDetails();
}
}
Main › main()
Run:
Main
/usr/lib/jvm/java-8-oracle/bin/java ...
The intrest is :5 OF BANK BOI
The intrest is :8 OF BANK SBI
The intrest is :9 OF BANK ICIC
Process finished with exit code 0
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