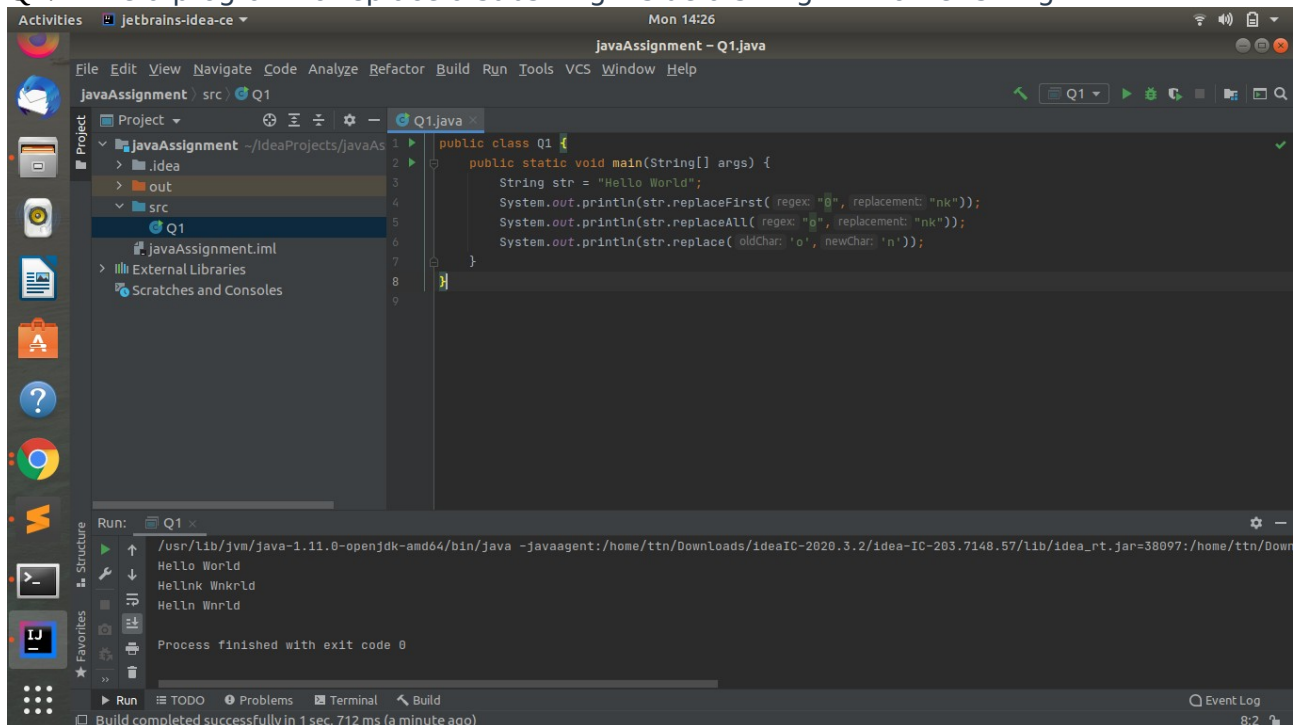


Q1: Write a program to replace a substring inside a string with other string ?



The screenshot shows the IntelliJ IDEA interface with a project named 'JavaAssignment'. The 'src' directory contains a file 'Q1.java'. The code in 'Q1.java' is as follows:

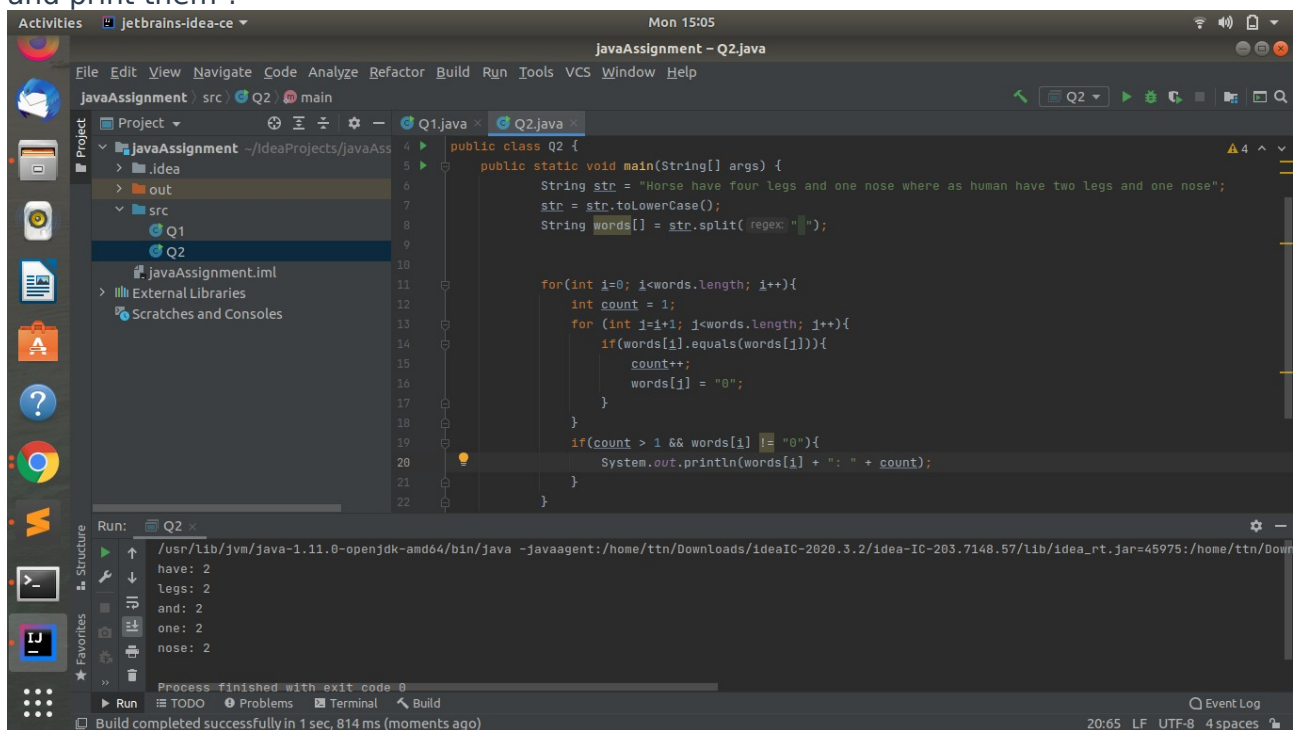
```
public class Q1 {  
    public static void main(String[] args) {  
        String str = "Hello World";  
        System.out.println(str.replaceFirst("o", "nk"));  
        System.out.println(str.replaceAll("o", "nk"));  
        System.out.println(str.replace("o", "n"));  
    }  
}
```

The 'Run' tab at the bottom shows the output of the program:

```
Run: Q1  
/usr/lib/jvm/java-1.11.0-openjdk-amd64/bin/java -javaagent:/home/ttn/Downloads/ideaIC-2020.3.2/idea-IC-203.7148.57/lib/idea_rt.jar=38097:/home/ttn/Down  
Hello World  
Hello WnkrlD  
Hello Wnrld  
Process finished with exit code 0
```

The build completed successfully in 1 sec, 712 ms (a minute ago).

Q2: Write a program to find the number of occurrences of the duplicate words in a string and print them ?



The screenshot shows the IntelliJ IDEA interface with a project named 'JavaAssignment'. The 'src' directory contains a file 'Q2.java'. The code in 'Q2.java' is as follows:

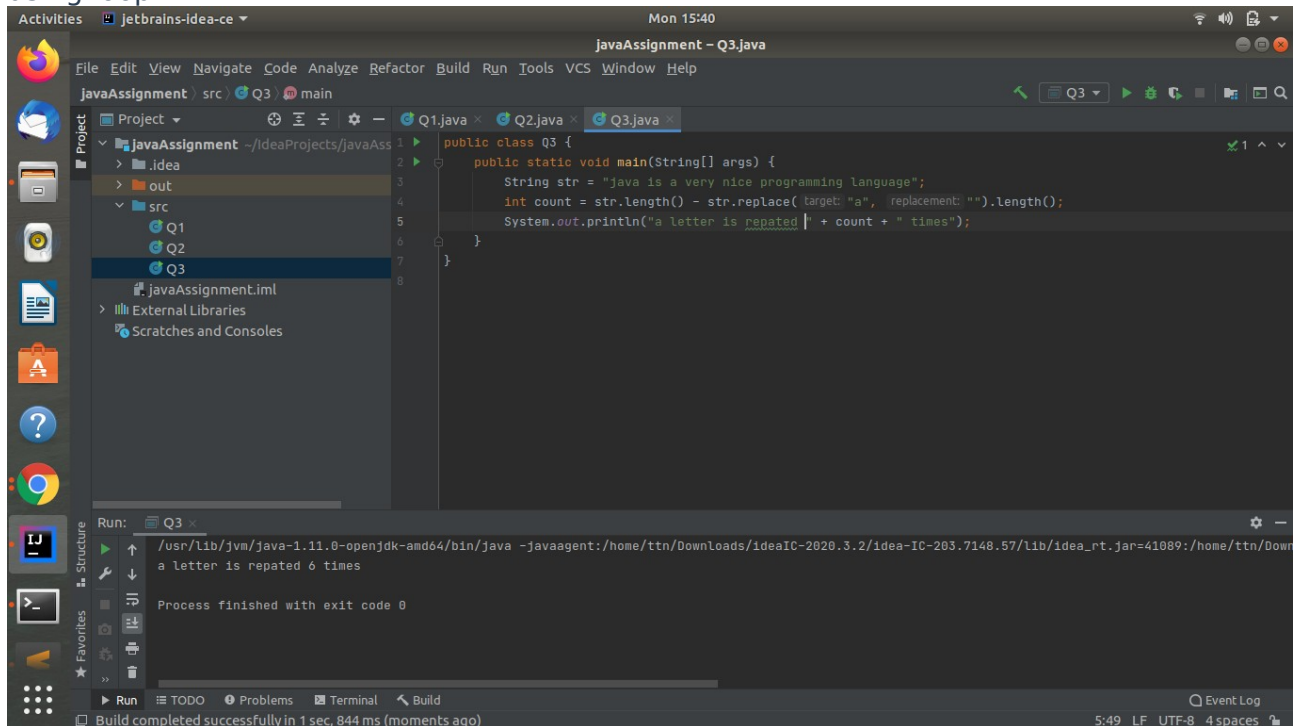
```
public class Q2 {  
    public static void main(String[] args) {  
        String str = "Horse have four legs and one nose where as human have two legs and one nose";  
        str = str.toLowerCase();  
        String words[] = str.split(" ");  
  
        for(int i=0; i<words.length; i++){  
            int count = 1;  
            for (int j=i+1; j<words.length; j++){  
                if(words[i].equals(words[j])){  
                    count++;  
                    words[j] = "0";  
                }  
            }  
            if(count > 1 && words[i] != "0"){  
                System.out.println(words[i] + ": " + count);  
            }  
        }  
    }  
}
```

The 'Run' tab at the bottom shows the output of the program:

```
Run: Q2  
/usr/lib/jvm/java-1.11.0-openjdk-amd64/bin/java -javaagent:/home/ttn/Downloads/ideaIC-2020.3.2/idea-IC-203.7148.57/lib/idea_rt.jar=45975:/home/ttn/Down  
have: 2  
legs: 2  
and: 2  
one: 2  
nose: 2  
Process finished with exit code 0
```

The build completed successfully in 1 sec, 814 ms (moments ago).

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

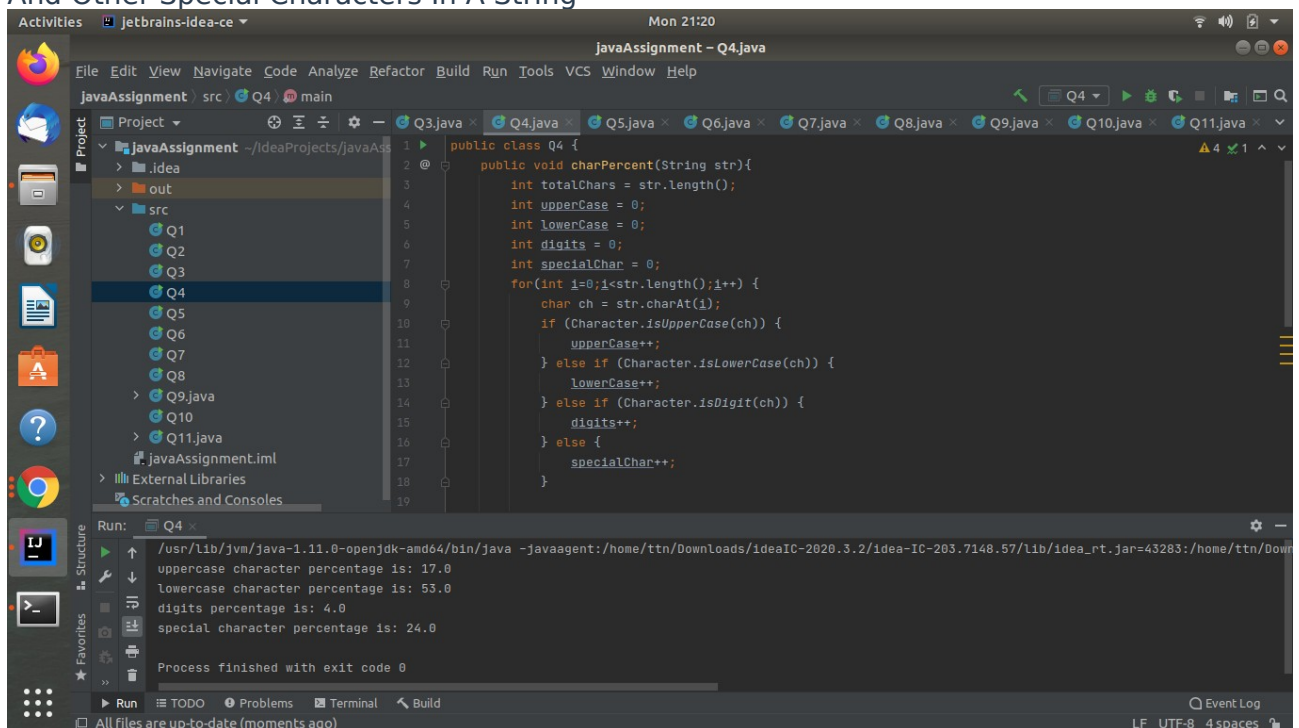


The screenshot shows the IntelliJ IDEA interface with a project named 'JavaAssignment'. The file explorer on the left shows the project structure, including 'src' and 'out' directories. The main editor displays the code for 'Q3.java'.

```
1 public class Q3 {
2     public static void main(String[] args) {
3         String str = "java is a very nice programming language";
4         int count = str.length() - str.replace(target: "a", replacement: "").length();
5         System.out.println("a letter is repated |" + count + " times");
6     }
7 }
8
```

The Run tab at the bottom shows the command executed: `/usr/lib/jvm/java-1.11.0-openjdk-amd64/bin/java -javaagent:/home/ttn/Downloads/ideaIC-2020.3.2/idea-IC-203.7148.57/lib/idea_rt.jar=41089:/home/ttn/Down`. The output is: `a letter is repated 6 times`. The process finished with exit code 0.

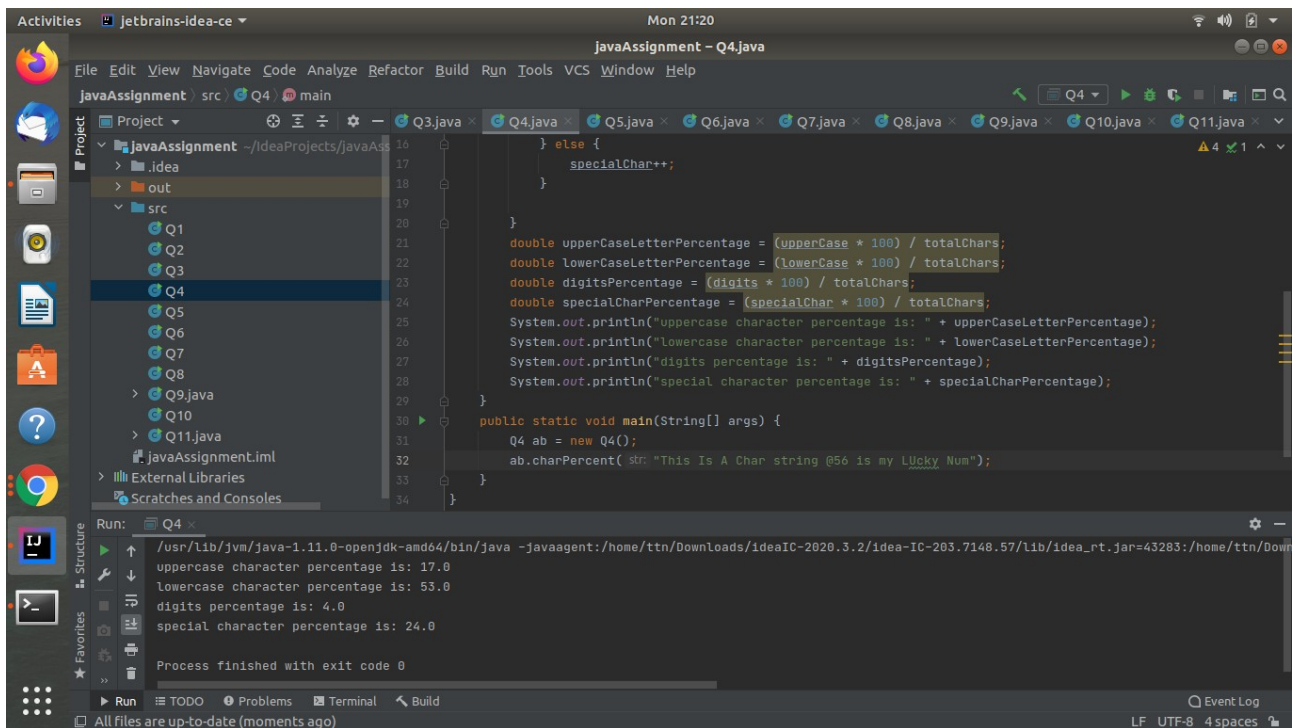
Q4: Calculate the number & Percentage Of Lowercase Letters,Uppercase Letters, Digits And Other Special Characters In A String



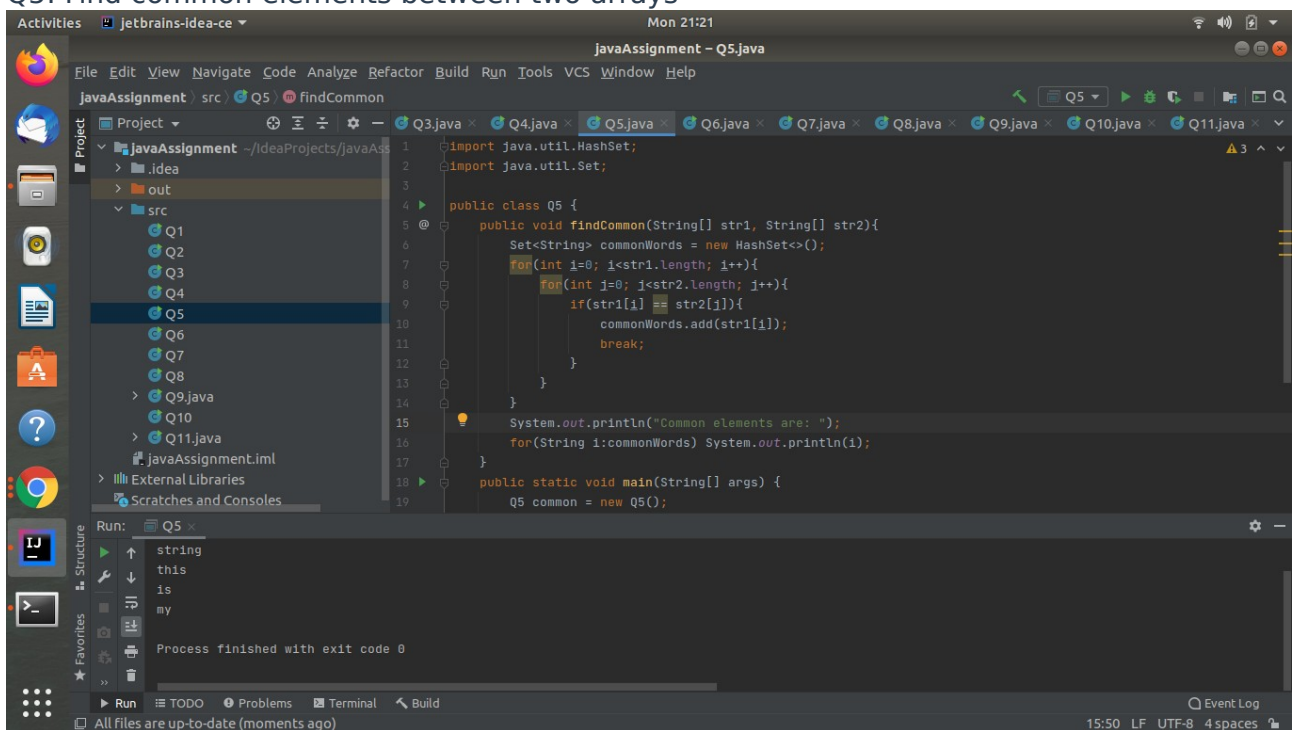
The screenshot shows the IntelliJ IDEA interface with a project named 'JavaAssignment'. The file explorer on the left shows the project structure, including 'src' and 'out' directories. The main editor displays the code for 'Q4.java'.

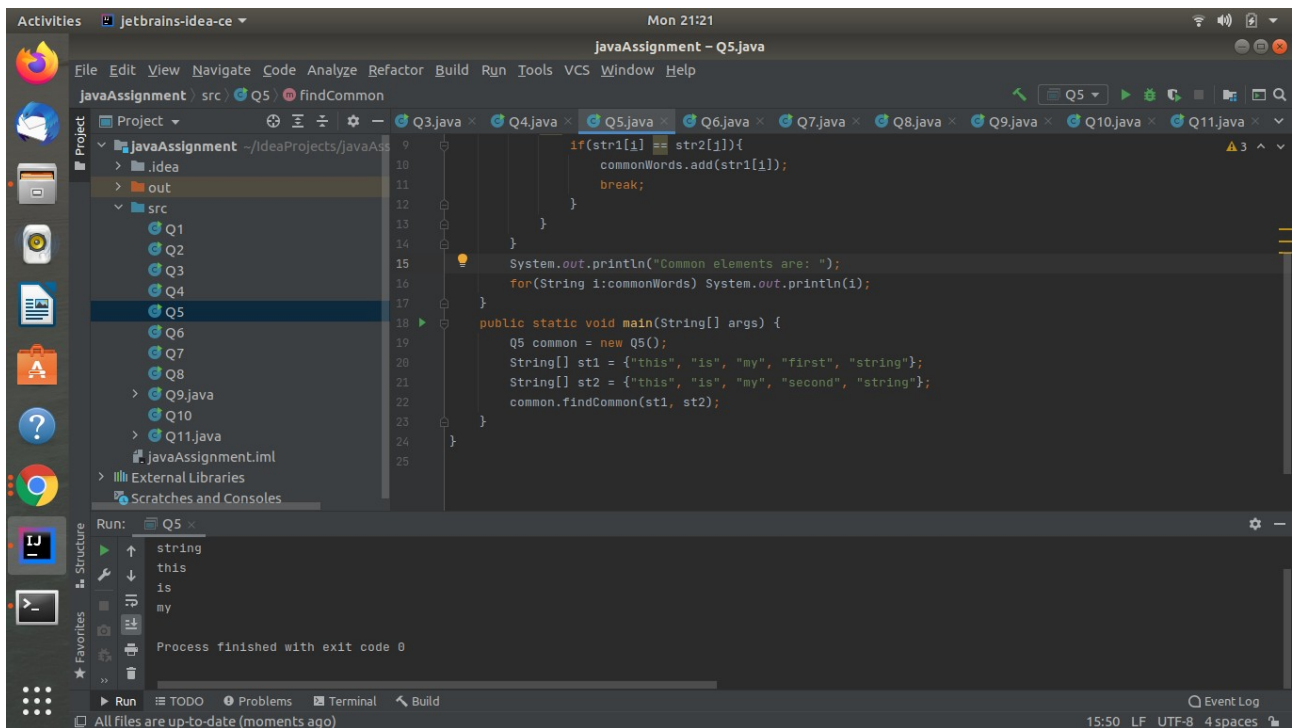
```
1 public class Q4 {
2     public void charPercent(String str){
3         int totalChars = str.length();
4         int upperCase = 0;
5         int lowerCase = 0;
6         int digits = 0;
7         int specialChar = 0;
8         for(int i=0;i<str.length();i++) {
9             char ch = str.charAt(i);
10            if (Character.isUpperCase(ch)) {
11                upperCase++;
12            } else if (Character.isLowerCase(ch)) {
13                lowerCase++;
14            } else if (Character.isDigit(ch)) {
15                digits++;
16            } else {
17                specialChar++;
18            }
19        }
20    }
21 }
```

The Run tab at the bottom shows the command executed: `/usr/lib/jvm/java-1.11.0-openjdk-amd64/bin/java -javaagent:/home/ttn/Downloads/ideaIC-2020.3.2/idea-IC-203.7148.57/lib/idea_rt.jar=43283:/home/ttn/Down`. The output is: `uppercase character percentage is: 17.0`, `lowercase character percentage is: 53.0`, `digits percentage is: 4.0`, and `special character percentage is: 24.0`. The process finished with exit code 0.

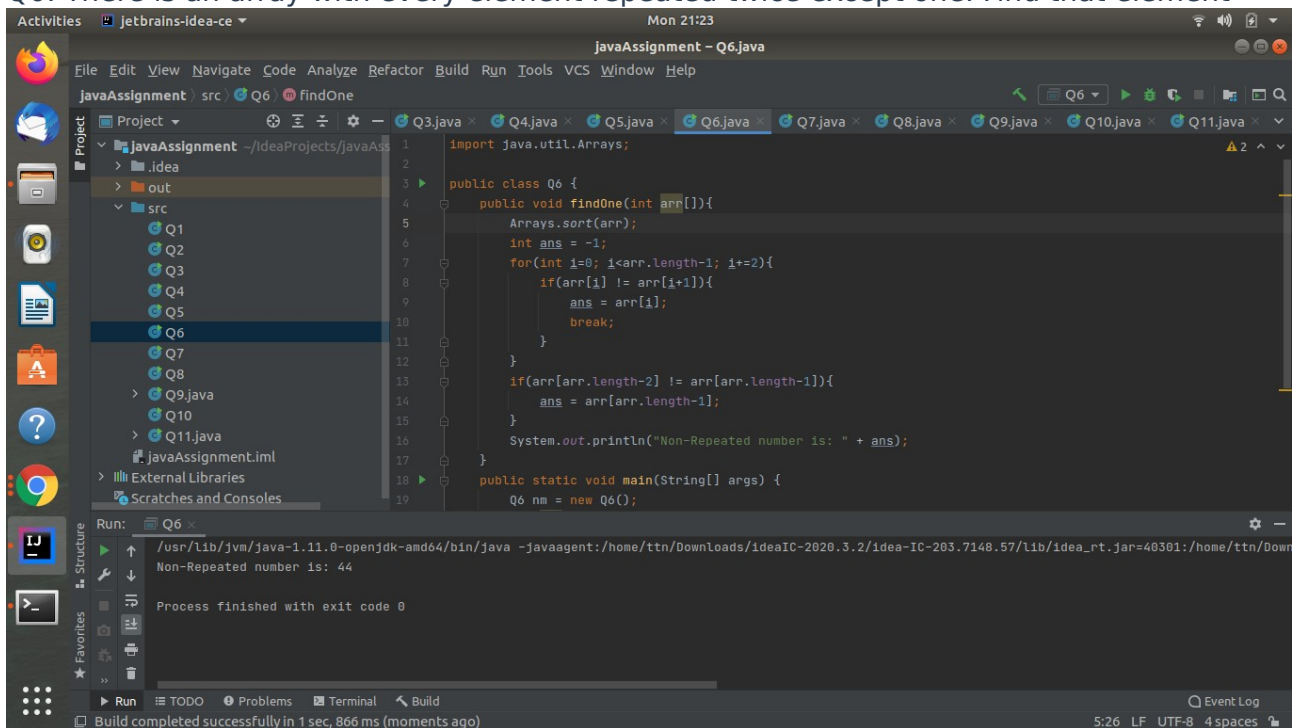


## Q5: Find common elements between two arrays

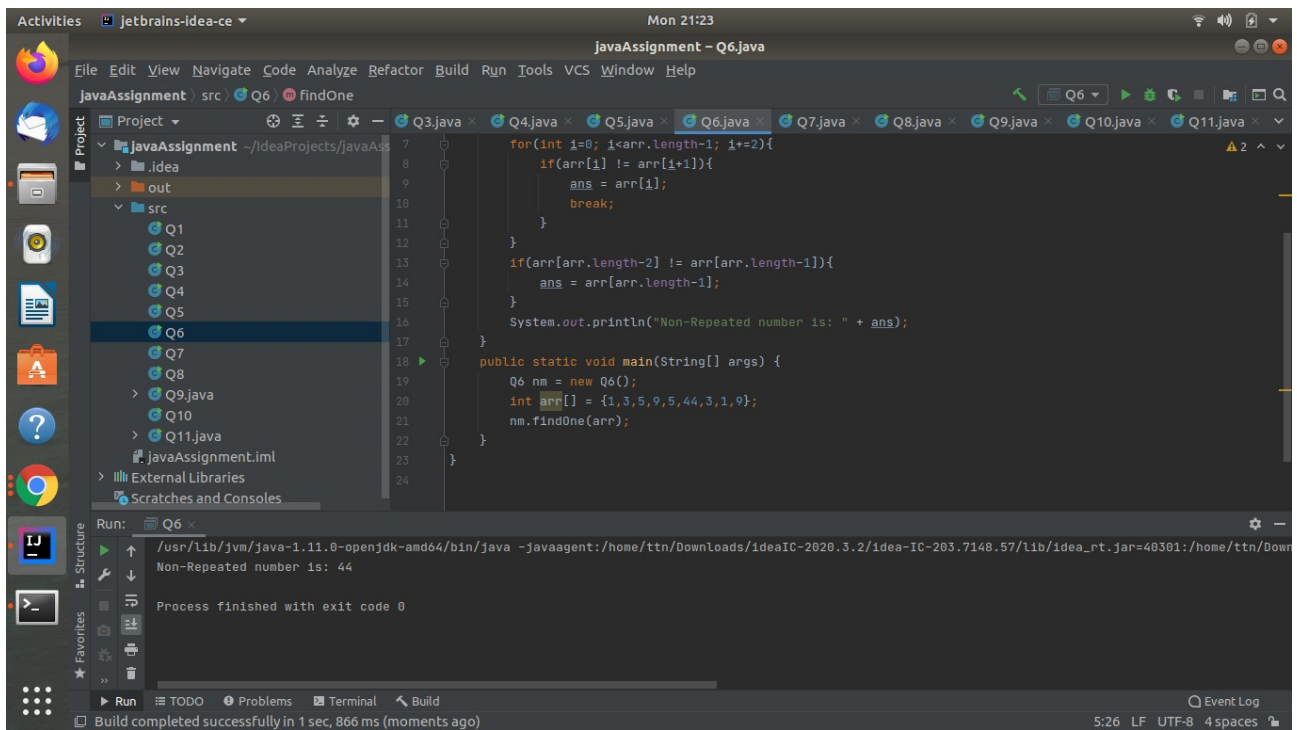




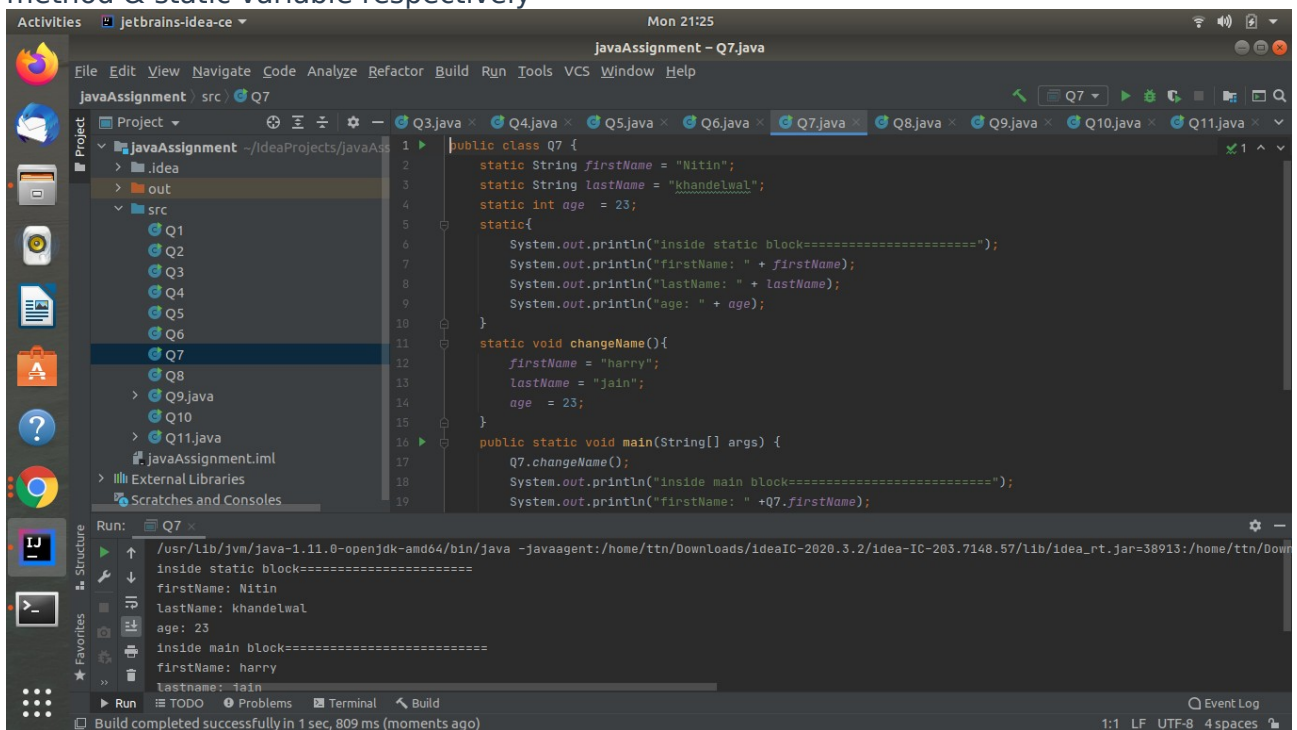
Q6: There is an array with every element repeated twice except one. Find that element

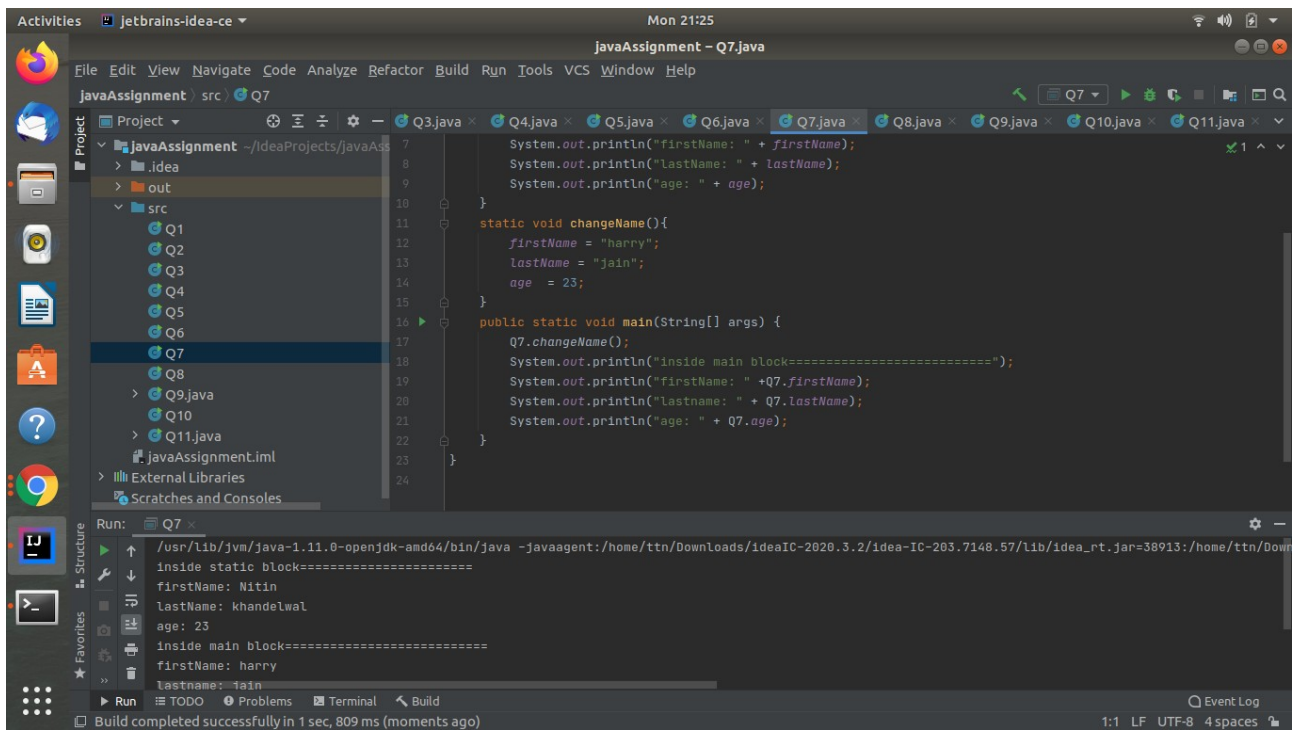




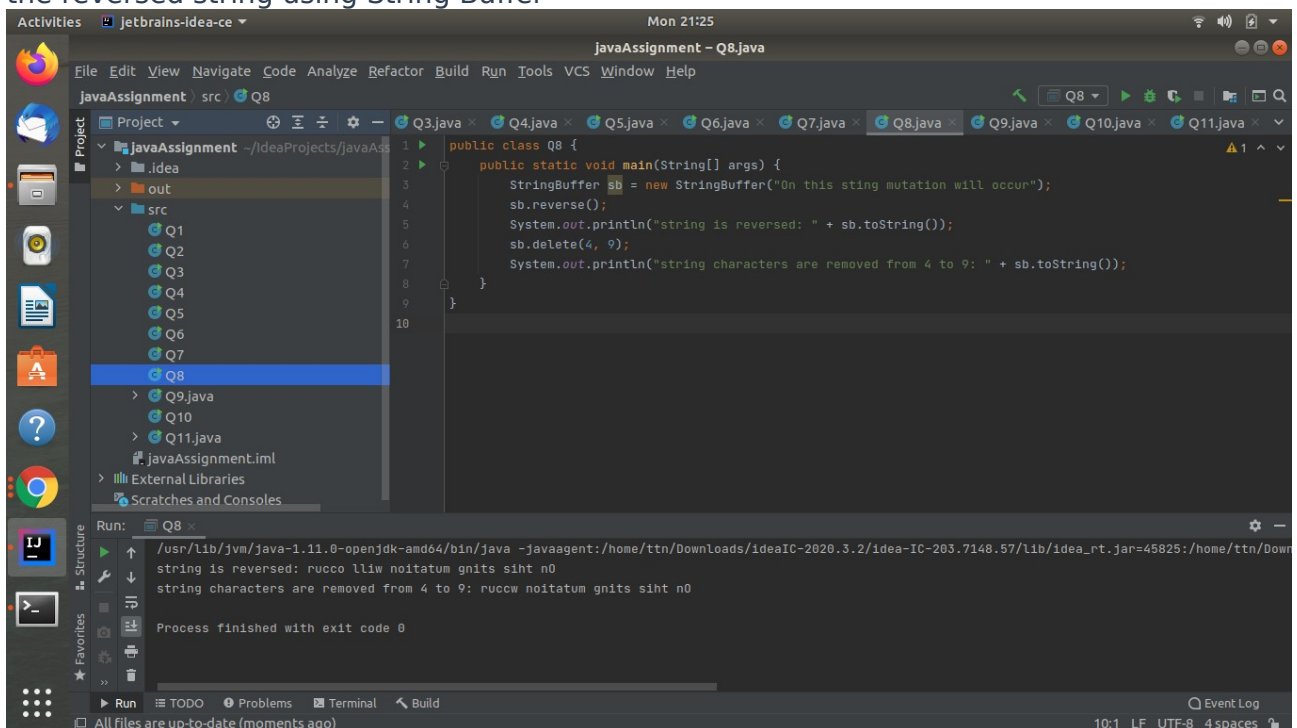


Q7: . Write a program to print your Firstname,LastName & age using static block,static method & static variable respectively

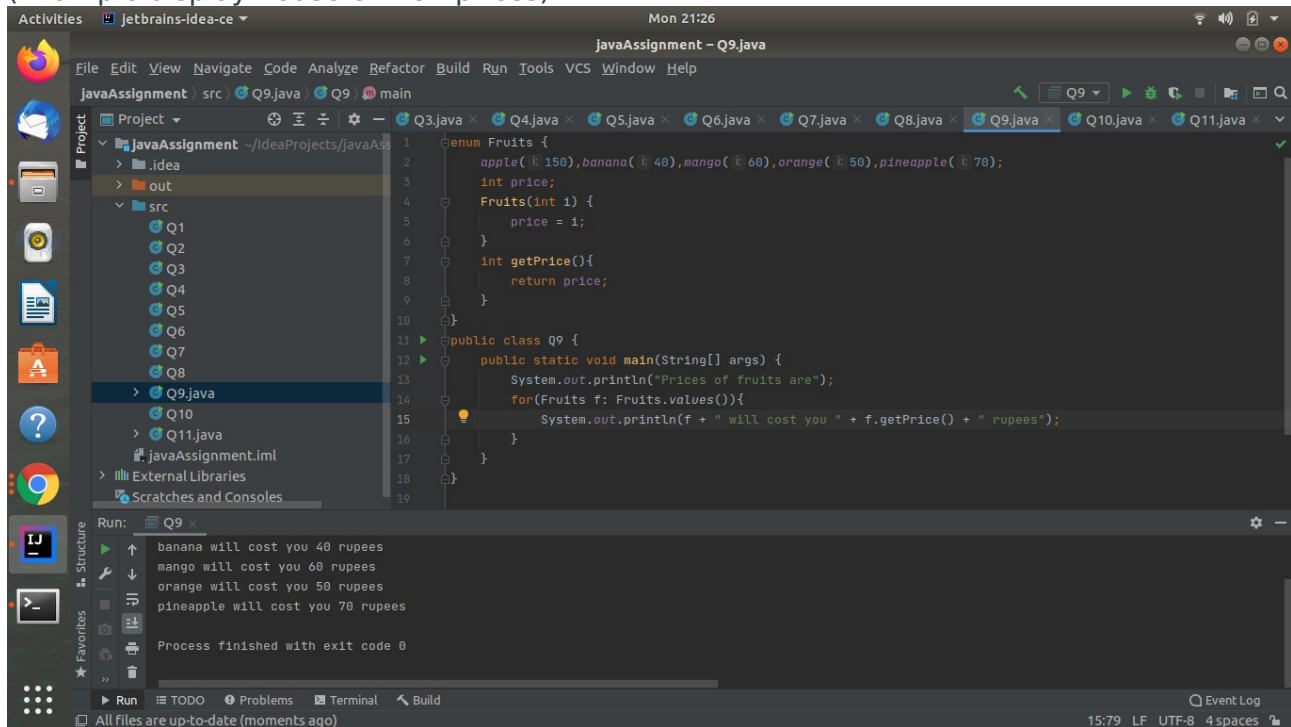




Q8: Write a program to reverse a string and remove character from index 4 to index 9 from the reversed string using String Buffer



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



```

1  enum Fruits {
2      apple(150), banana(40), mango(60), orange(50), pineapple(70);
3      int price;
4      Fruits(int i) {
5          price = i;
6      }
7      int getPrice() {
8          return price;
9      }
10 }
11 public class Q9 {
12     public static void main(String[] args) {
13         System.out.println("Prices of fruits are");
14         for(Fruits f: Fruits.values()) {
15             System.out.println(f + " will cost you " + f.getPrice() + " rupees");
16         }
17     }
18 }

```

Run: Q9

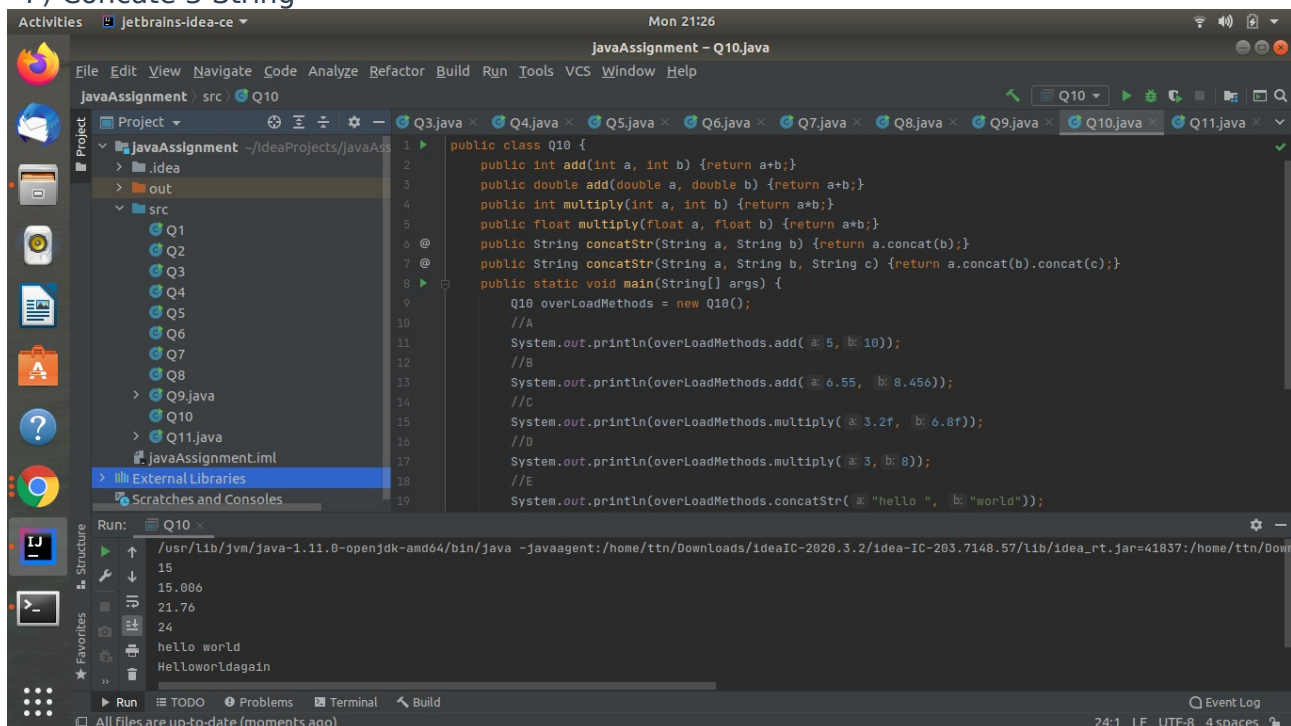
```

banana will cost you 40 rupees
mango will cost you 60 rupees
orange will cost you 50 rupees
pineapple will cost you 70 rupees
Process finished with exit code 0

```

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



```

1  public class Q10 {
2      public int add(int a, int b) {return a+b;}
3      public double add(double a, double b) {return a+b;}
4      public int multiply(int a, int b) {return a*b;}
5      public float multiply(float a, float b) {return a*b;}
6      public String concatStr(String a, String b) {return a.concat(b);}
7      public String concatStr(String a, String b, String c) {return a.concat(b).concat(c);}
8      public static void main(String[] args) {
9          Q10 overLoadMethods = new Q10();
10         //A
11         System.out.println(overLoadMethods.add(5, 10));
12         //B
13         System.out.println(overLoadMethods.add(6.55, 8.456));
14         //C
15         System.out.println(overLoadMethods.multiply(3.2f, 6.8f));
16         //D
17         System.out.println(overLoadMethods.multiply(3, 8));
18         //E
19         System.out.println(overLoadMethods.concatStr("hello ", "world"));

```

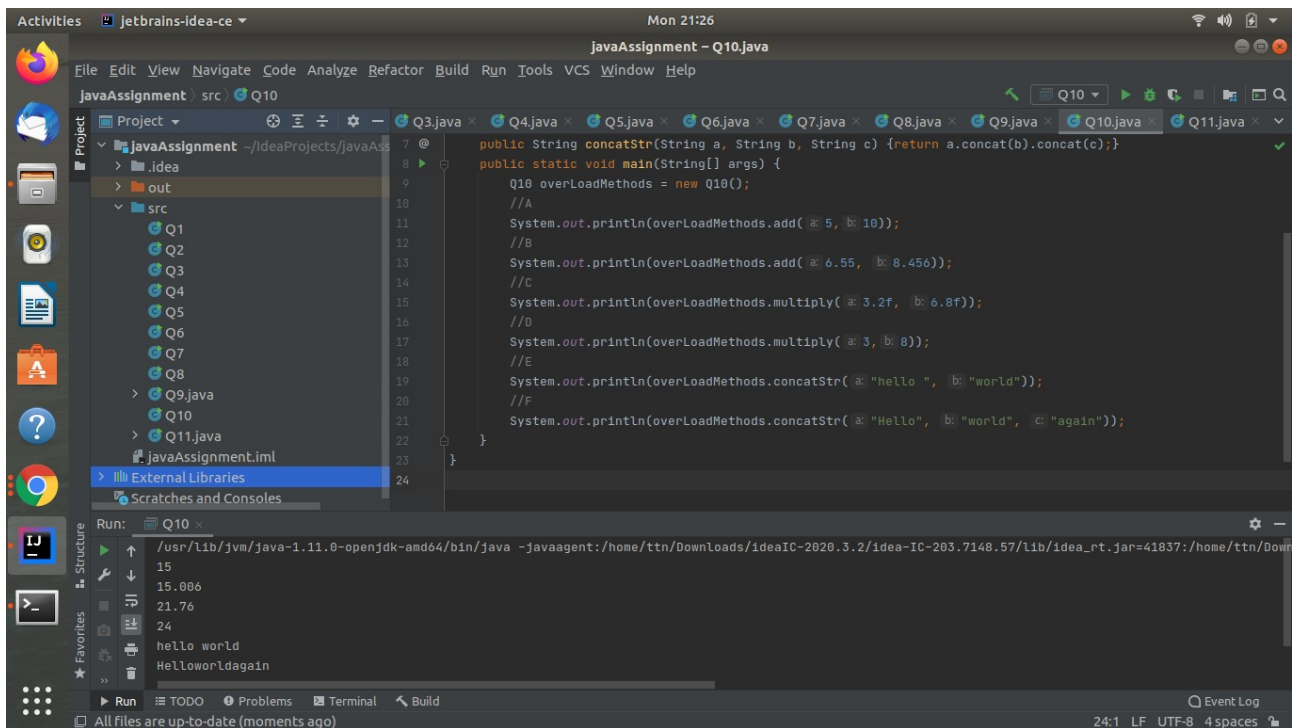
Run: Q10

```

/usr/lib/jvm/java-1.11.0-openjdk-amd64/bin/java -javaagent:/home/ttn/Downloads/ideaIC-2020.3.2/idea-IC-203.7148.57/lib/idea_rt.jar=41837:/home/ttn/Down
15
15.086
21.76
24
hello world
Helloworldagain

```





Q11: Create 3 sub class of bank SBI,BOI,ICICI all 4 should have method called getDetails which provide there specific details like rateofinterest etc,print details of every banks

