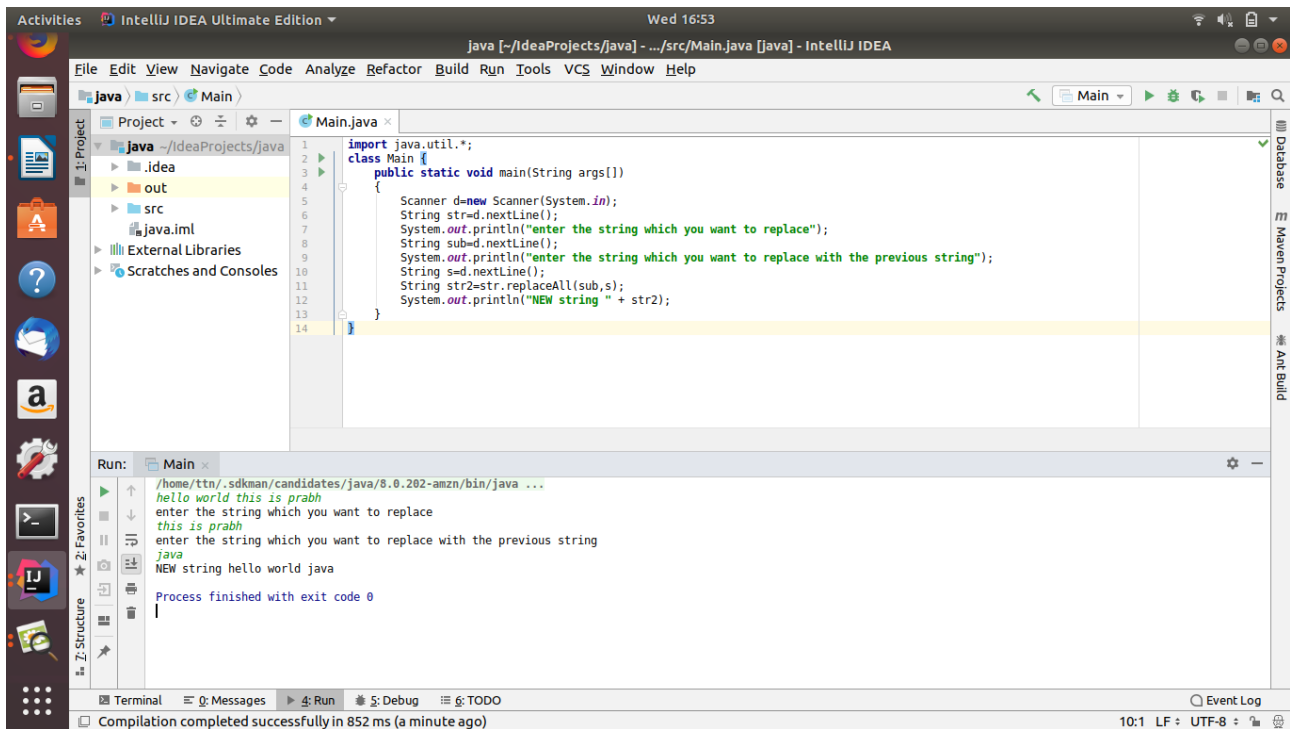
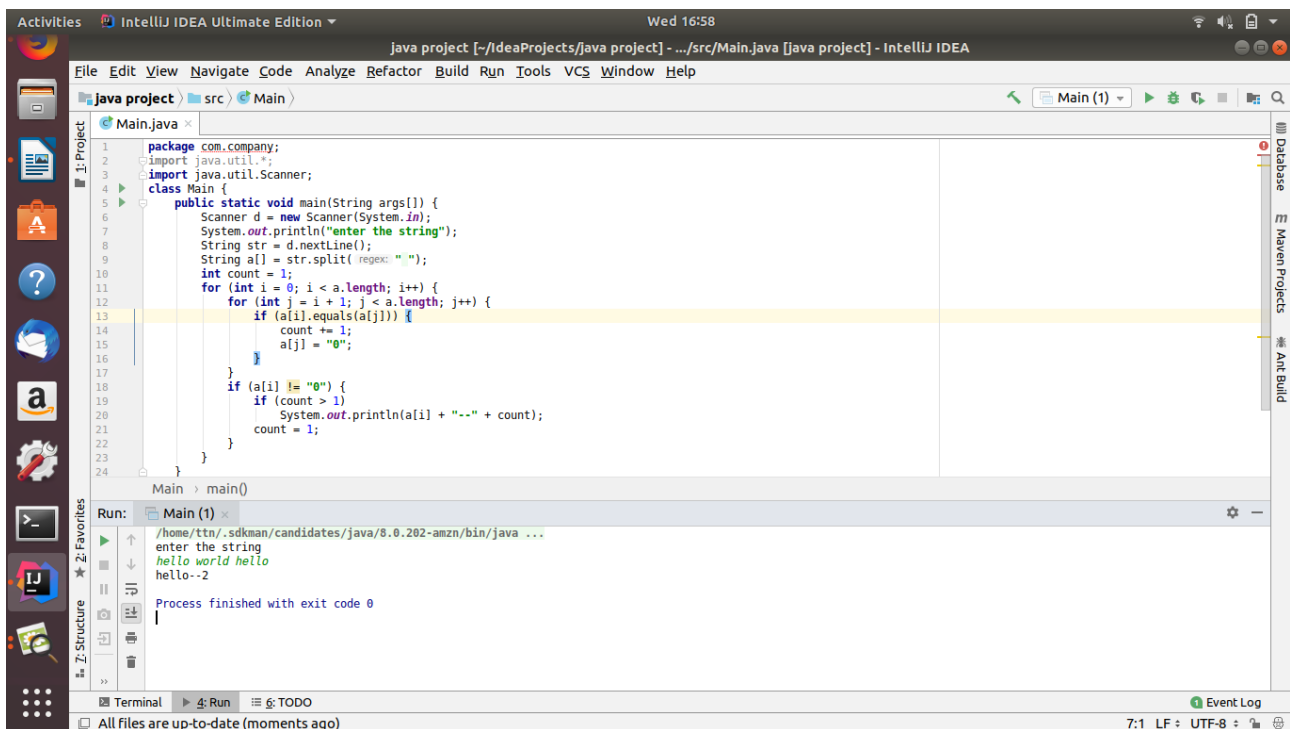


# Ans 1



# Ans 2



## Ans 3

```
package main;
public class TestMain
{
    public static void main(String[] args)
    {
        String str = "This is an Example Of The Character";
        int charcount = str.length() - str.replaceAll( regex: "a", replacement: "").length();
        System.out.println("Occurrence Of a In String: " + charcount);
    }
}
```

## Ans 4

The screenshot displays the IntelliJ IDEA IDE interface. The main editor window shows a Java file named `Main.java` with the following code:

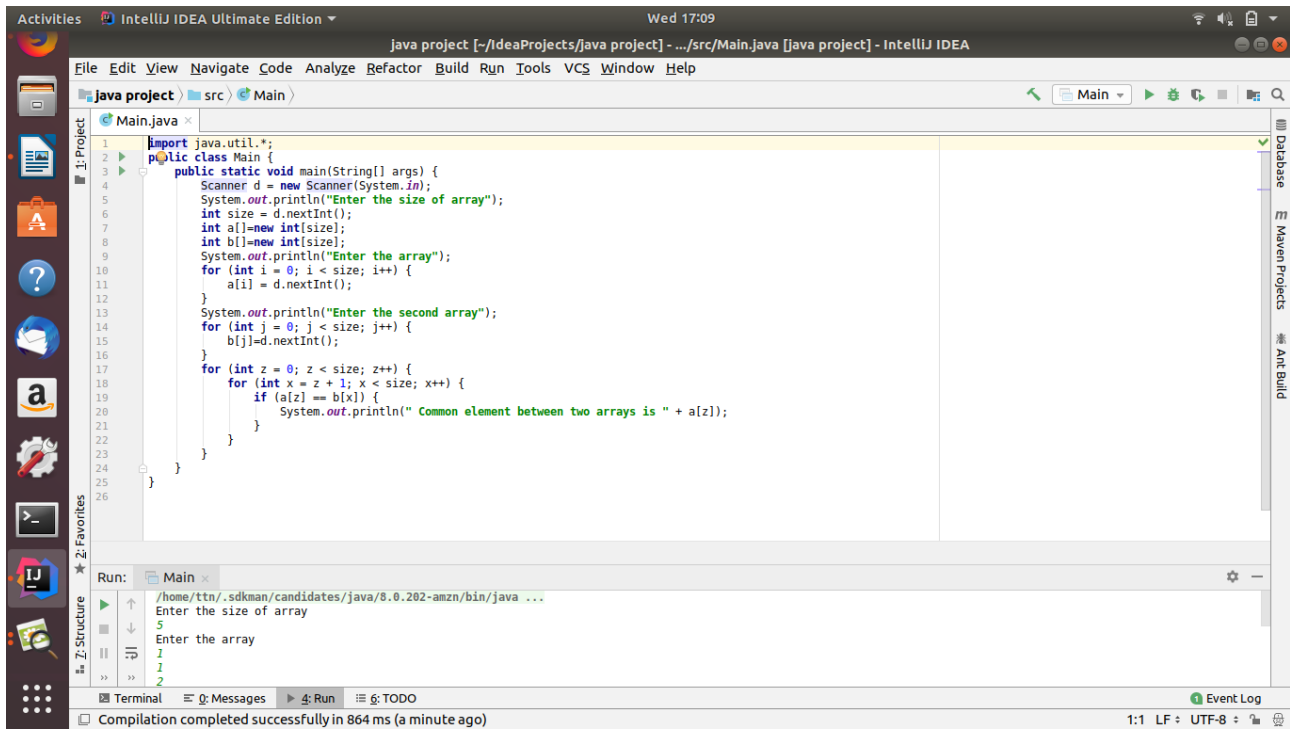
```
public static void main(String[] args) {
    Scanner d = new Scanner(System.in);
    System.out.println("enter the string");
    String str = d.nextLine();
    double len = str.length();
    double countOfLower = 0;
    double countOfUpper = 0;
    double countOfChar = 0;
    double countOfDigit = 0;
    for (int i = 0; i < len; i++) {
        char ch = str.charAt(i);
        if (Character.isUpperCase(ch)) {
            countOfUpper++;
        } else if (Character.isLowerCase(ch)) {
            countOfLower++;
        } else if (Character.isDigit(ch)) {
            countOfDigit++;
        } else {
            countOfChar++;
        }
    }
    double perU = (countOfUpper/len) * 100;
    System.out.println("percentage " + perU + " count of upper case characters" + countOfUpper);
    double perL = (countOfLower / len) * 100;
    System.out.println("percentage " + perL + " count of lower case characters" + countOfLower);
    double perD = (countOfDigit / len) * 100;
    System.out.println("percentage " + perD + " count of lower case characters" + countOfDigit);
    double perC = (countOfChar/len) * 100;
    System.out.println("percentage " + perC + " count of lower case characters" + countOfChar);
}
```

The Run window at the bottom shows the output of the program:

```
enter the string
HELL0cdhhdjcg4894678@@@@@
percentage 18.51851851852 count of upper case characters5.0
percentage 33.33333333333 count of lower case characters9.0
percentage 25.92592592592 count of lower case characters7.0
percentage 22.22222222222 count of lower case characters6.0
```

The status bar at the bottom indicates "Compilation completed successfully in 935 ms (moments ago)".

Ans 5



The screenshot shows the IntelliJ IDEA interface with a Java project. The main editor displays the following code:

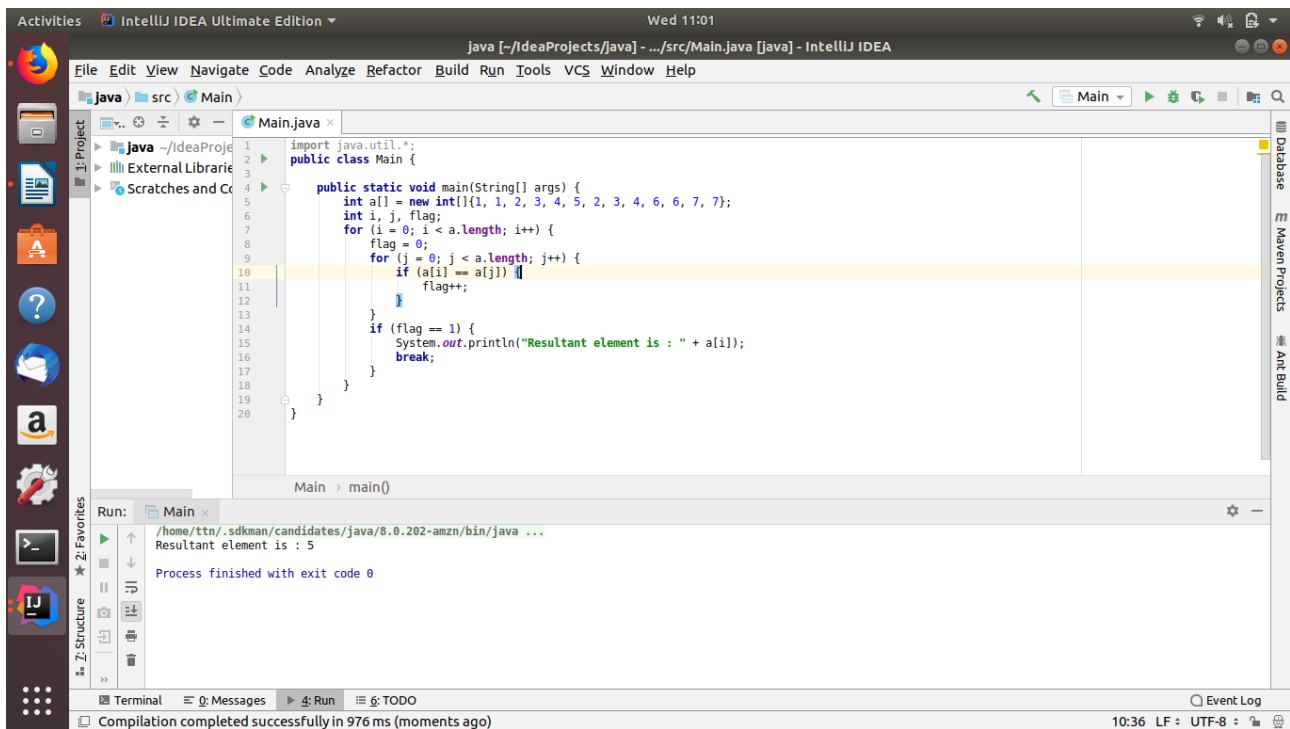
```
1 import java.util.*;
2 public class Main {
3     public static void main(String[] args) {
4         Scanner d = new Scanner(System.in);
5         System.out.println("Enter the size of array");
6         int size = d.nextInt();
7         int a[] = new int[size];
8         int b[] = new int[size];
9         System.out.println("Enter the array");
10        for (int i = 0; i < size; i++) {
11            a[i] = d.nextInt();
12        }
13        System.out.println("Enter the second array");
14        for (int j = 0; j < size; j++) {
15            b[j] = d.nextInt();
16        }
17        for (int z = 0; z < size; z++) {
18            for (int x = z + 1; x < size; x++) {
19                if (a[z] == b[x]) {
20                    System.out.println("Common element between two arrays is " + a[z]);
21                }
22            }
23        }
24    }
25 }
26
```

The Run window shows the execution of the program with the following input and output:

```
Run: Main
/home/ttn/.sdkman/candidates/java/8.0.202-amzn/bin/java ...
Enter the size of array
5
Enter the array
1
1
2
```

The status bar at the bottom indicates "Compilation completed successfully in 864 ms (a minute ago)".

Ans 6



The screenshot shows the IntelliJ IDEA interface with a Java project. The main editor displays the following code:

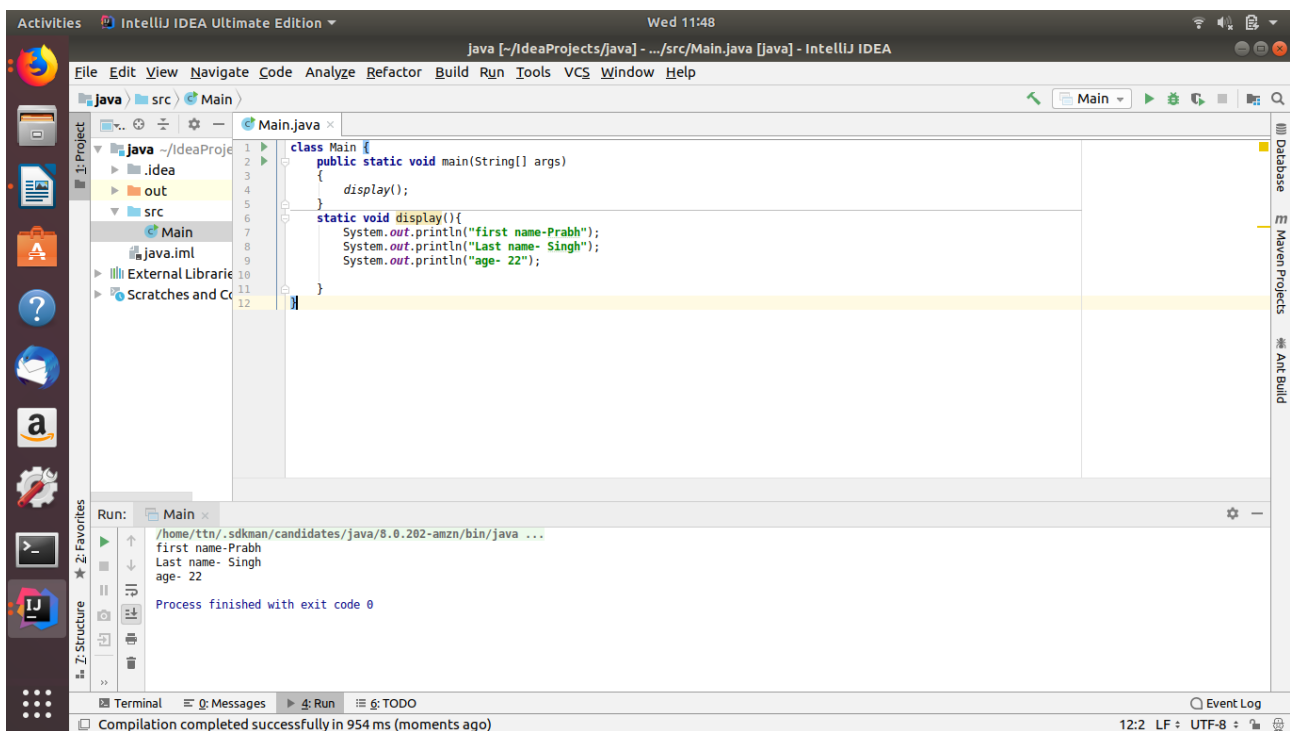
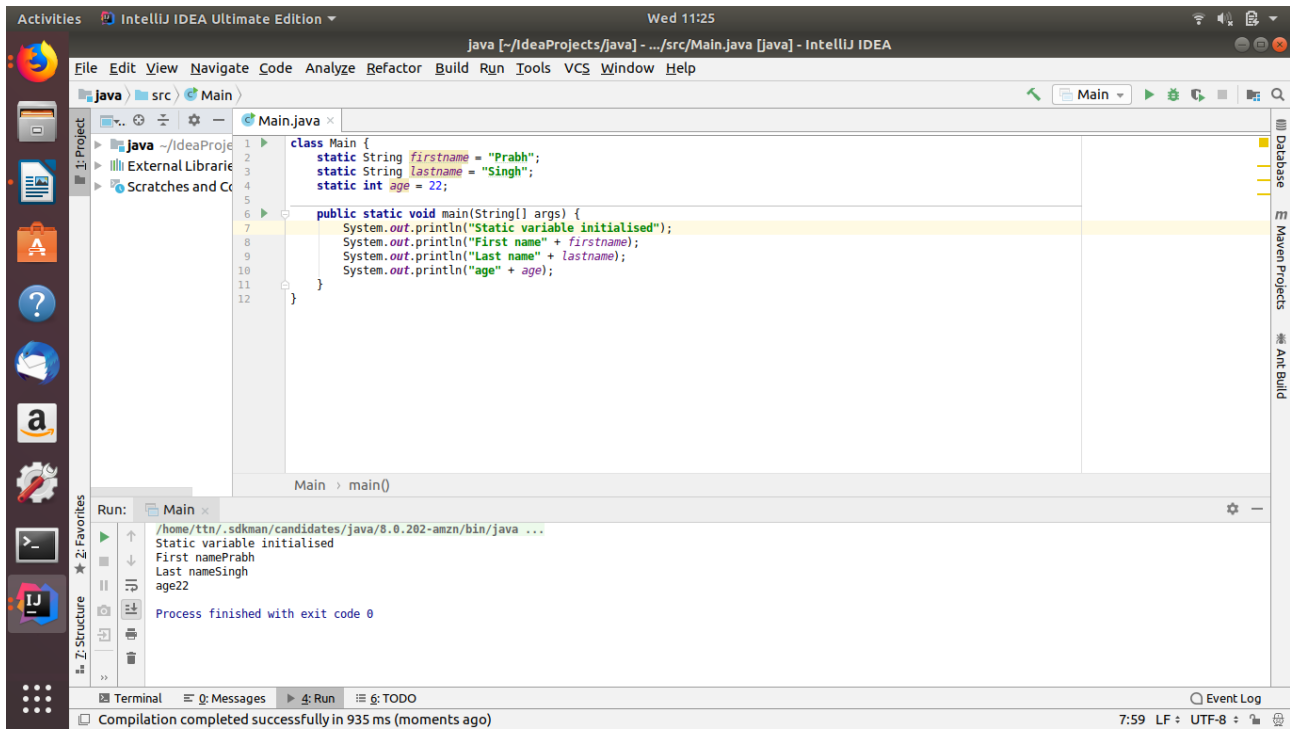
```
1 import java.util.*;
2 public class Main {
3     public static void main(String[] args) {
4         int a[] = new int[] {1, 1, 2, 3, 4, 5, 2, 3, 4, 6, 6, 7, 7};
5         int i, j, flag;
6         for (i = 0; i < a.length; i++) {
7             flag = 0;
8             for (j = 0; j < a.length; j++) {
9                 if (a[i] == a[j]) {
10                     flag++;
11                 }
12             }
13             if (flag == 1) {
14                 System.out.println("Resultant element is : " + a[i]);
15                 break;
16             }
17         }
18     }
19 }
20
```

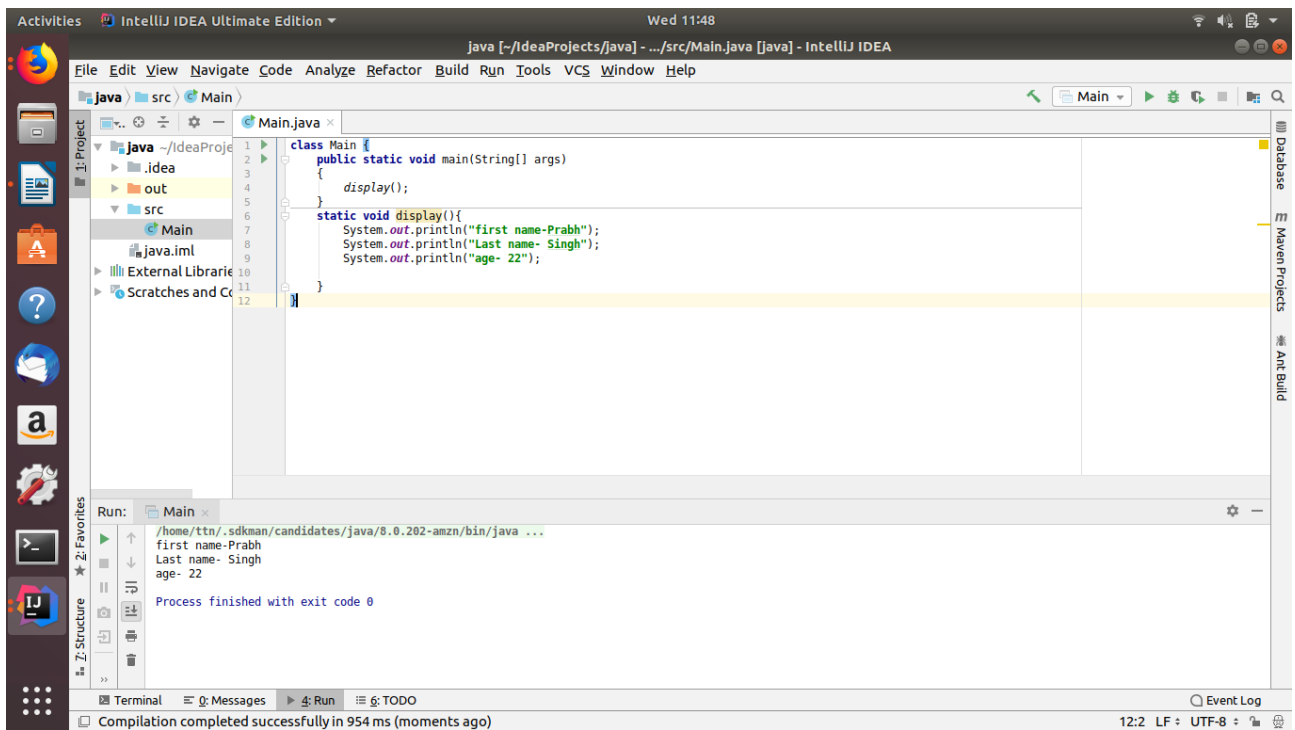
The Run window shows the execution of the program with the following output:

```
Run: Main
/home/ttn/.sdkman/candidates/java/8.0.202-amzn/bin/java ...
Resultant element is : 5
Process finished with exit code 0
```

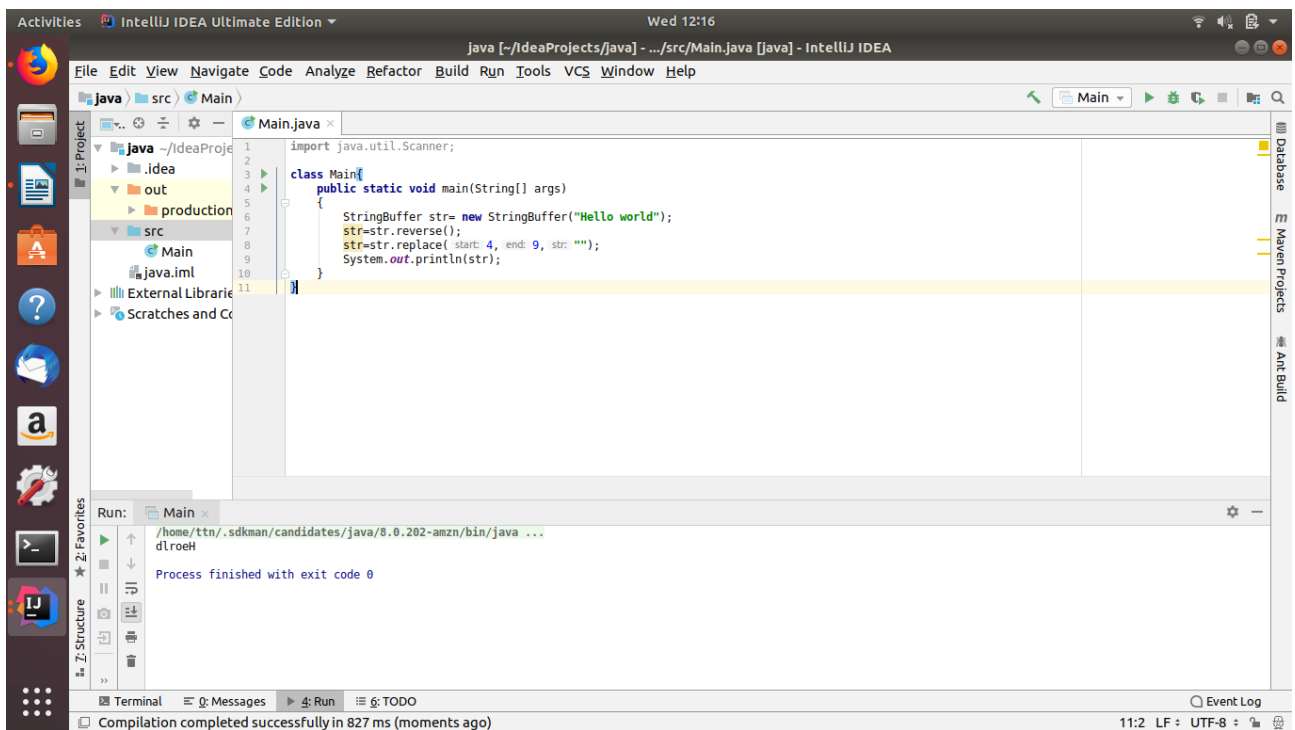
The status bar at the bottom indicates "Compilation completed successfully in 976 ms (moments ago)".

Ans 7

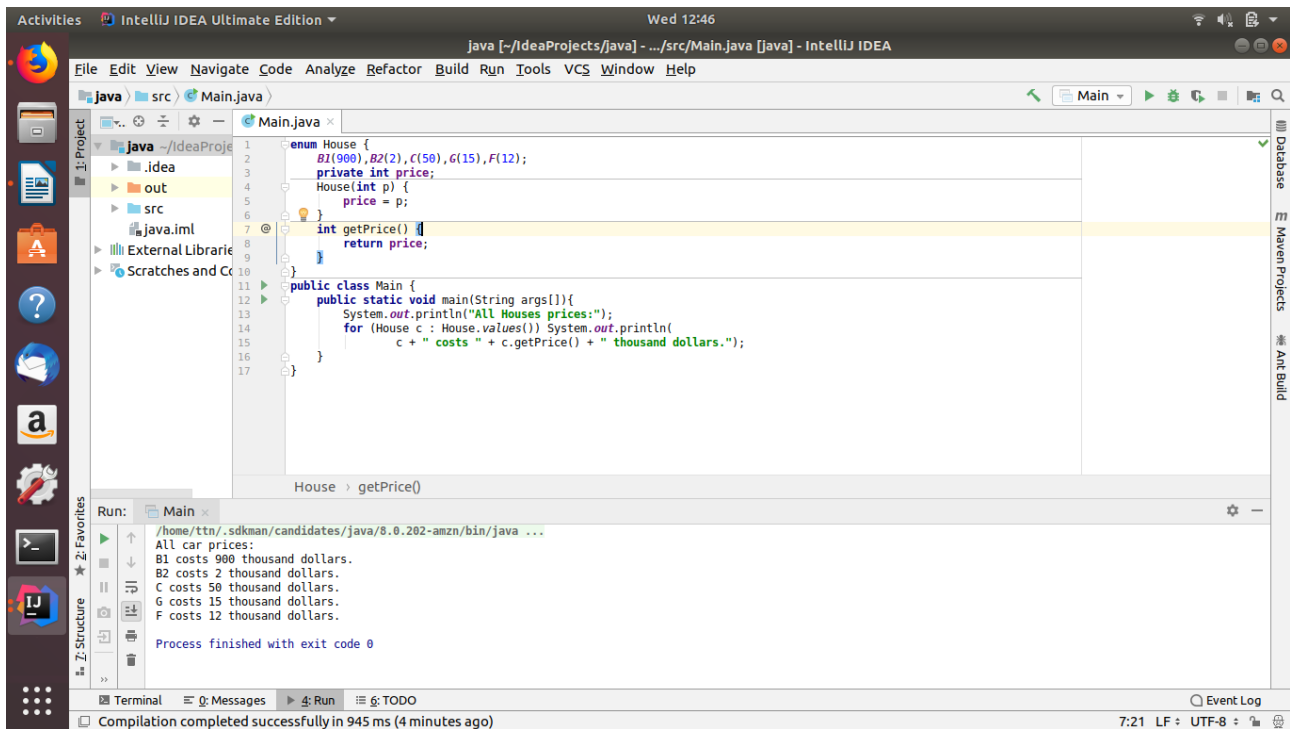




Ans 8



Ans 9



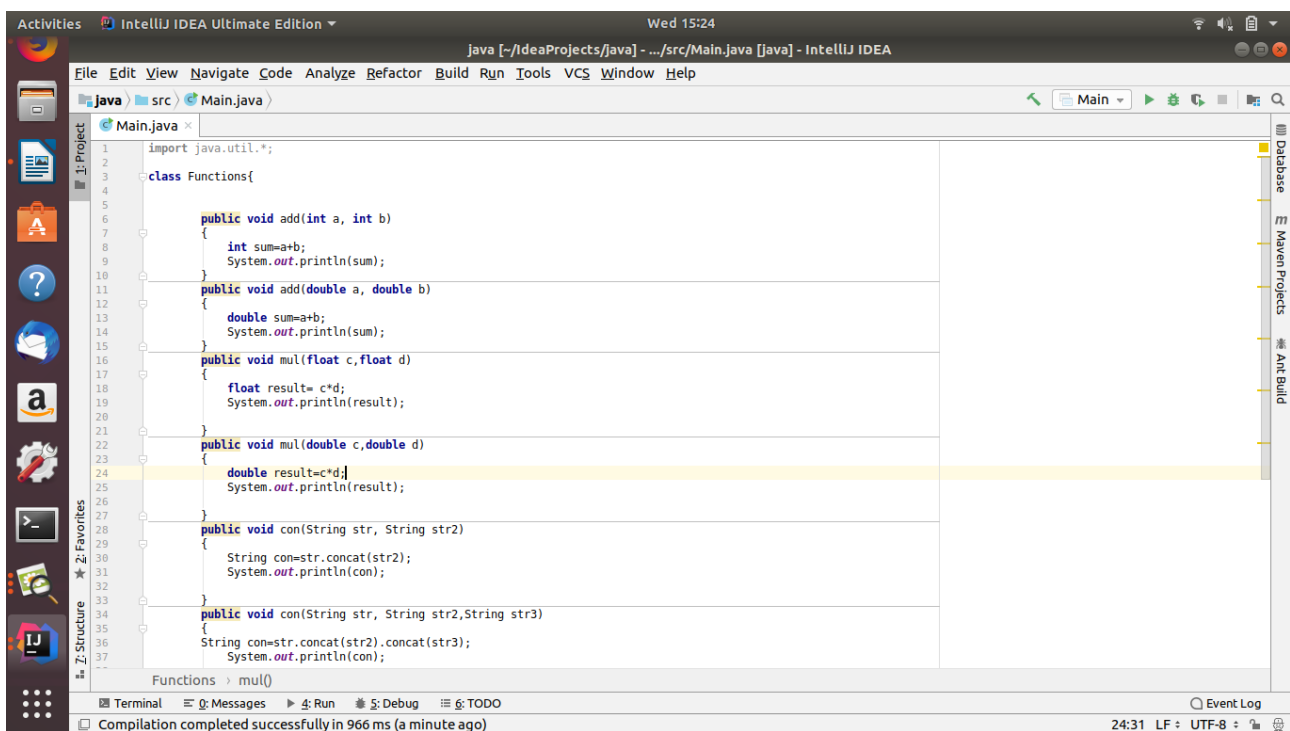
```
1 enum House {
2     B1(900), B2(2), C(50), G(15), F(12);
3     private int price;
4     House(int p) {
5         price = p;
6     }
7     int getPrice() {
8         return price;
9     }
10 }
11 public class Main {
12     public static void main(String args[]){
13         System.out.println("All Houses prices:");
14         for (House c : House.values()) System.out.println(
15             c + " costs " + c.getPrice() + " thousand dollars.");
16     }
17 }
```

Run: Main

```
/home/ttn/.sdkman/candidates/java/8.0.202-amzn/bin/java ...
All car prices:
B1 costs 900 thousand dollars.
B2 costs 2 thousand dollars.
C costs 50 thousand dollars.
G costs 15 thousand dollars.
F costs 12 thousand dollars.
Process finished with exit code 0
```

Compilation completed successfully in 945 ms (4 minutes ago)

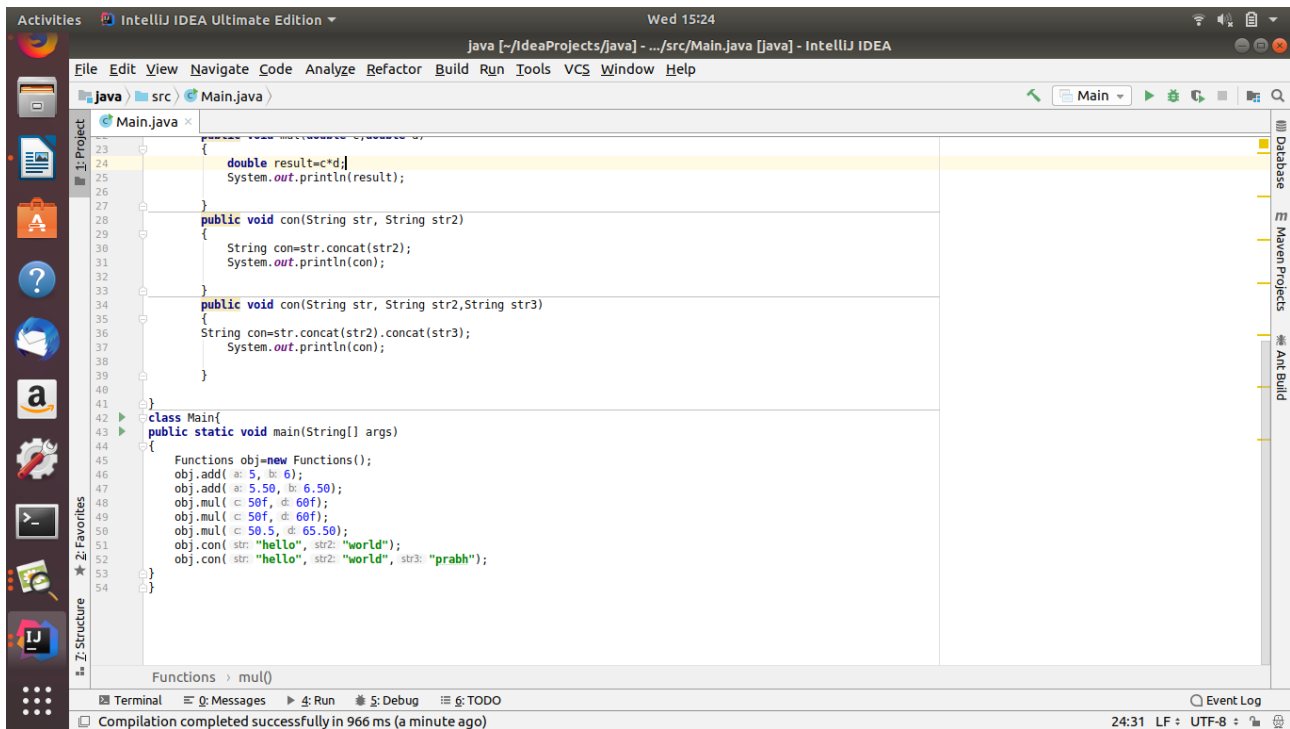
Ans 10



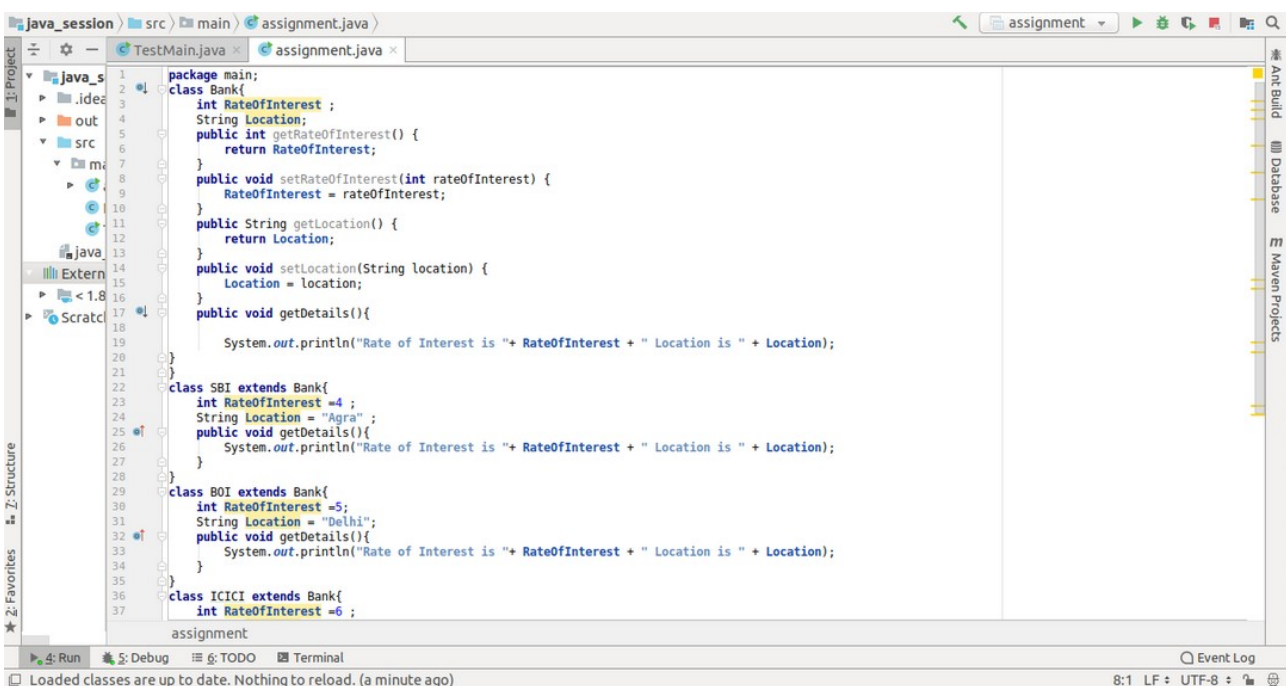
```
1 import java.util.*;
2
3 class Functions{
4
5     public void add(int a, int b)
6     {
7         int sum=a+b;
8         System.out.println(sum);
9     }
10    public void add(double a, double b)
11    {
12        double sum=a+b;
13        System.out.println(sum);
14    }
15    public void mul(float c,float d)
16    {
17        float result= c*d;
18        System.out.println(result);
19    }
20    public void mul(double c,double d)
21    {
22        double result=c*d;
23        System.out.println(result);
24    }
25    public void con(String str, String str2)
26    {
27        String con=str.concat(str2);
28        System.out.println(con);
29    }
30    public void con(String str, String str2,String str3)
31    {
32        String con=str.concat(str2).concat(str3);
33        System.out.println(con);
34    }
35 }
```

Functions > mul()

Compilation completed successfully in 966 ms (a minute ago)



Ans 11



IDE interface showing a Java project named "java\_session" with a source file "assignment.java" in the "src/main" directory. The code defines a class "ICICI" extending "Bank" and a class "assignment" with a "main" method.

```
34 }
35
36 class ICICI extends Bank{
37     int RateOfInterest =6 ;
38     String Location = "Goa";
39     public void getDetails(){
40         System.out.println("Rate of Interest is " + RateOfInterest + " Location is " + Location);
41     }
42 }
43
44 class assignment{
45     public static void main(String[] args) {
46         Bank obj = new Bank();
47         obj.getDetails();
48         Bank obj1 = new SBI();
49         obj1.getDetails();
50         Bank obj2 = new BOI();
51         obj2.getDetails();
52         Bank obj3 = new ICICI();
53         obj3.getDetails();
54     }
55 }
```

The IDE also shows a Run configuration named "assignment" and a console output window displaying the results of the program execution:

```
Run: TestMain x TestMain x assignment x
/home/ttn/.sdkman/candidates/java/8.0.202-amzn/bin/java ...
Rate of Interest is 0 Location is null
Rate of Interest is 0 Location is null
Rate of Interest is 5 Location is Delhi
Rate of Interest is 6 Location is Goa
Process finished with exit code 0
```

At the bottom, the status bar indicates "Loaded classes are up to date. Nothing to reload. (2 minutes ago)" and "8:1 LF UTF-8".