Task 5 Solutions

1.Write a program using map() method, to convert a list of Strings into uppercase. If the given List is:Stream names = Stream.of("aBc", "d", "ef");

The output

2.Write a program to check whether the Strings in the List are empty or not and print the list having non-empty strings.

If the given List is:

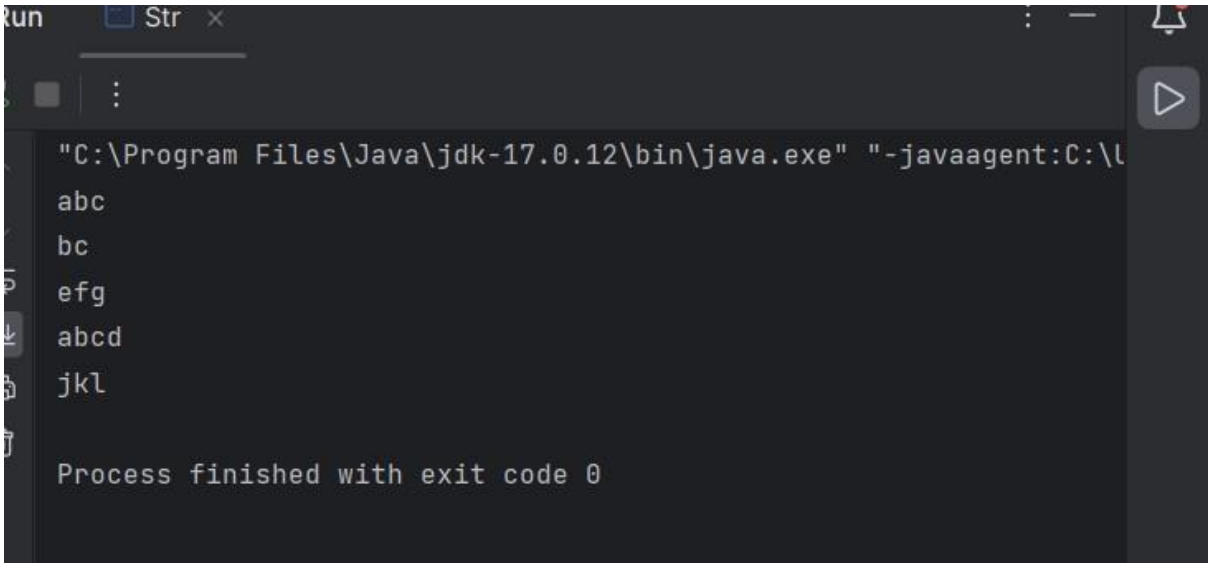
List strings = Arrays.asList("abc", "", "bc", "efg", "abcd", "", "jkl")

```java
import java.util.Arrays;
import java.util.List;

public class Str {
    public static void main(String[] args) {
        List<String> strings = Arrays.asList("abc", "", "bc", "efg", "abcd", "", "jkl");

        strings.stream()
                .filter(s -> !s.isEmpty())
                .forEach(System.out::println);
    }
}
```

The output:



3.You are a teacher in school. In your class there are 10 students, you have decided to give special gifts to those students whose names start with “A”. You are asked to separate those students with the help of a Java program.

Requirement:

- Use List interface to store the student names
- Use a lambda expression and the Stream API to filter the students

```java
public class Name {
    public static void main(String[] args) {
        // Step 1: Store 10 student names in a List
        List<String> students = Arrays.asList(
                "Arun", "Bala", "Anjali", "Divya", "Amit",
                "Kiran", "Aarthi", "Ravi", "Akash", "Suresh"
        );

        System.out.println("Students whose names start with 'A':");

        // Step 2: Use Stream + Lambda to filter names starting with 'A'
        students.stream()
                .filter(name -> name.startsWith("A"))
                .forEach(System.out::println);
    }
}
```

The output:

```
"C:\Program Files\Java\jdk-17.0.12\bin\java.exe" "-javaagent:C:\l
Students whose names start with 'A':
Arun
Anjali
Amit
Aarthi
Akash

Process finished with exit code 0
```

4. Rajesh has been given a task to create an app which takes the user's birthdate as input and calculates their age, you have to help him to build this app using the **java.time.LocalDate** class.

Input :
Enter your birthdate (yyyy-mm-dd): 1990-05-15

Output :
Your age is: 33 years, 4 months, and 13 days.

Main.java | Str.java | Name.java | BirthDate.java

```java
import java.time.LocalDate;
import java.time.Period;
import java.util.Scanner;

public class BirthDate {
    public static void main(String[] args) {
        // Step 1: Take birthdate input
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter your birthdate (yyyy-mm-dd): ");
        String input = scanner.nextLine();

        LocalDate birthDate = LocalDate.parse(input);
        LocalDate currentDate = LocalDate.now();


        Period age = Period.between(birthDate, currentDate);


        System.out.printf("Your age is: %d years, %d months, and %d days.%n",
                age.getYears(), age.getMonths(), age.getDays());
    }
}
```

The output: