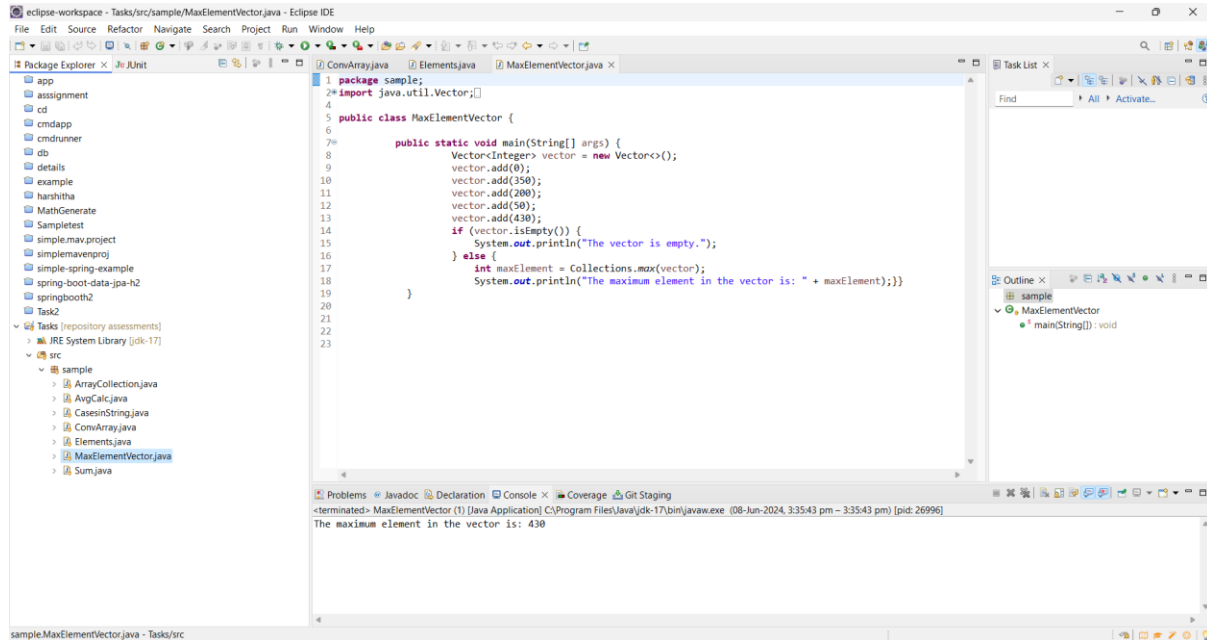
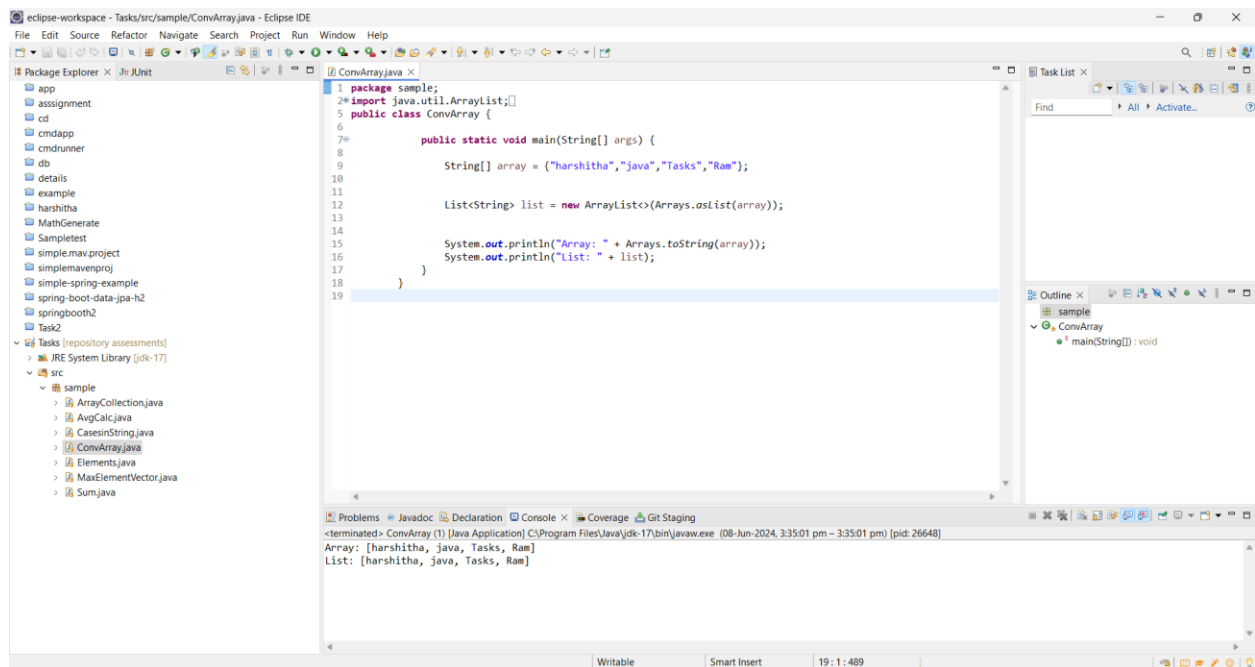


Tasks for the Day

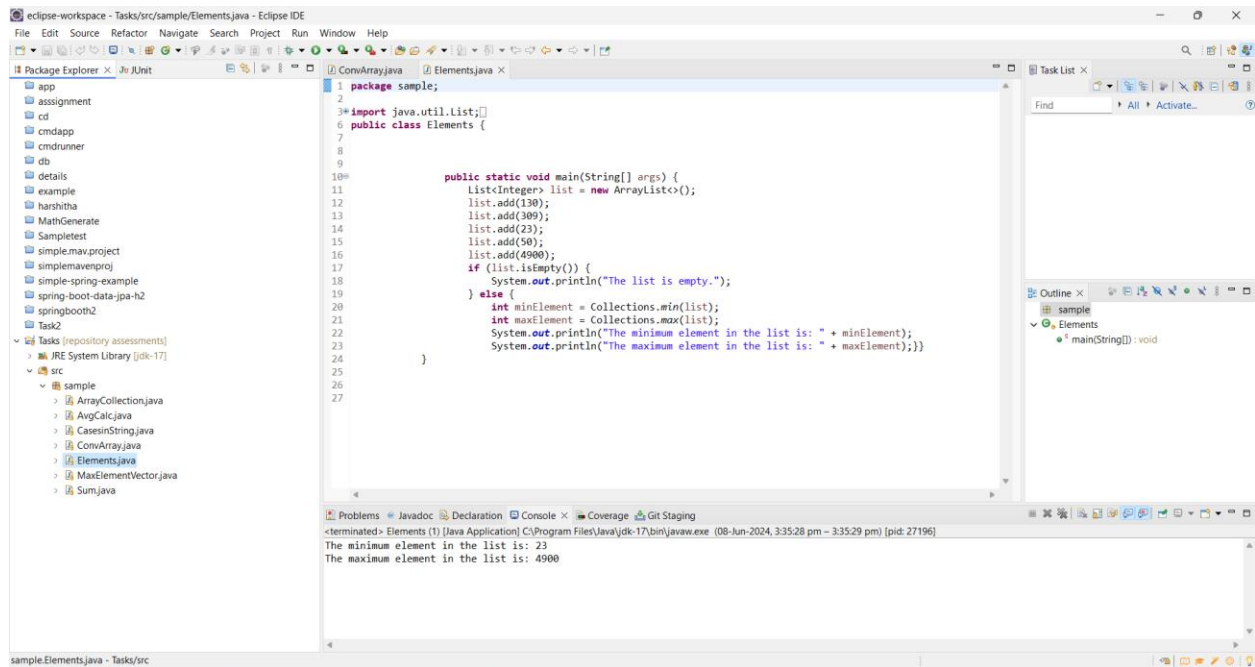
Task 1 : Write a Java program to get the maximum element value from the Vector



Task 2 : Write a Java Program to convert an array to Collection?



Task 3 : Write a Java Program to find the minimum and maximum elements in the List?



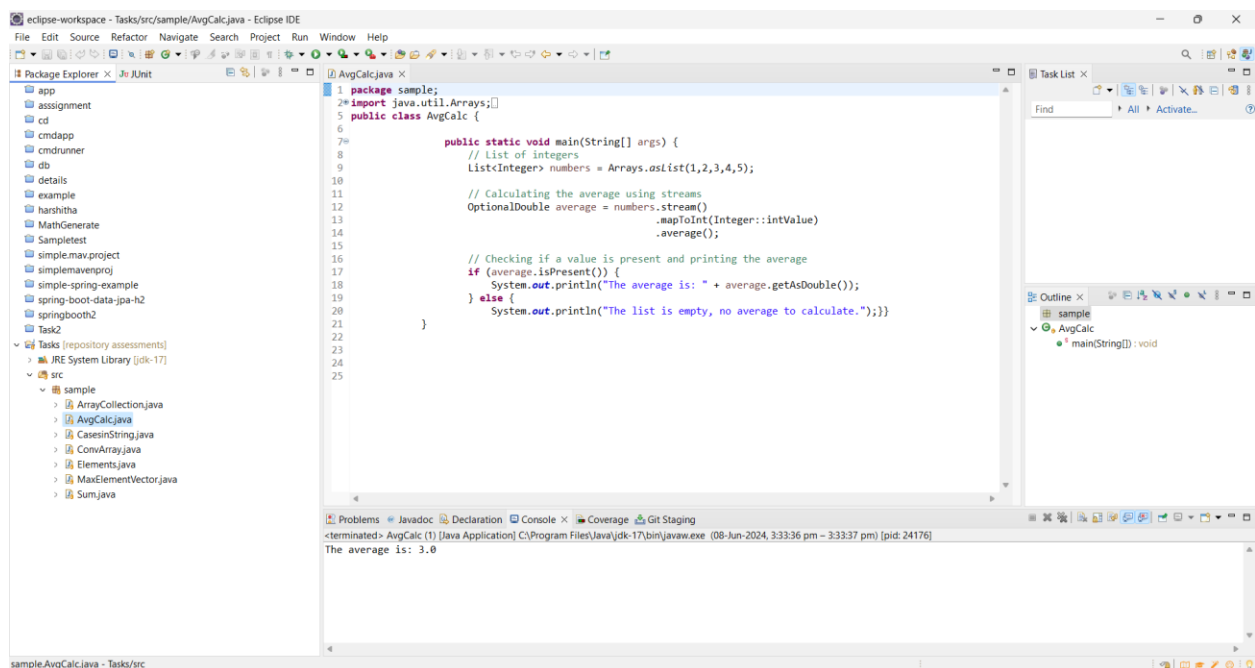
The screenshot shows the Eclipse IDE with a Java project named 'sample'. The 'Elements.java' file is open, containing the following code:

```
1 package sample;
2
3 import java.util.List;
4
5 public class Elements {
6
7
8
9
10
11     public static void main(String[] args) {
12         List<Integer> list = new ArrayList<>();
13         list.add(130);
14         list.add(309);
15         list.add(23);
16         list.add(50);
17         list.add(4900);
18         if (list.isEmpty()) {
19             System.out.println("The list is empty.");
20         } else {
21             int minElement = Collections.min(list);
22             int maxElement = Collections.max(list);
23             System.out.println("The minimum element in the list is: " + minElement);
24             System.out.println("The maximum element in the list is: " + maxElement);
25         }
26     }
27 }
```

The console output shows:

```
<terminated> Elements (1) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (08-Jun-2024, 3:35:28 pm - 3:35:29 pm) [pid: 27196]
The minimum element in the list is: 23
The maximum element in the list is: 4900
```

Task 4 : Write a Java program to calculate the average of a list of integers using streams.



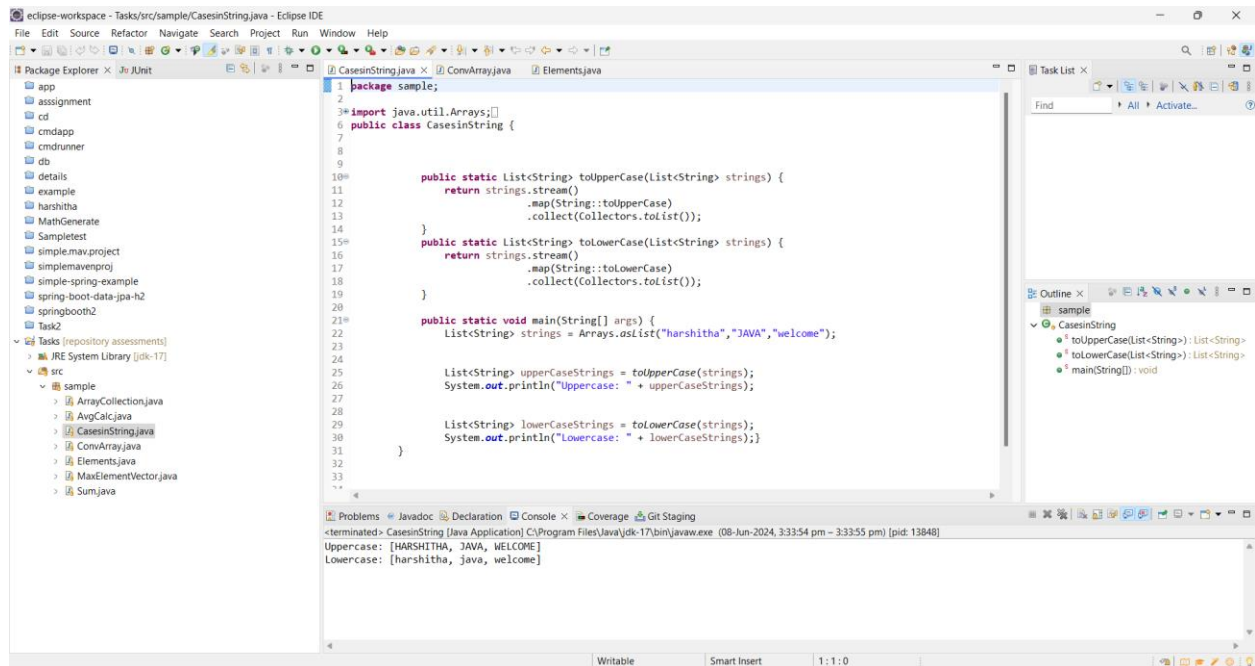
The screenshot shows the Eclipse IDE with a Java project named 'sample'. The 'AvgCalc.java' file is open, containing the following code:

```
1 package sample;
2 import java.util.Arrays;
3
4 public class AvgCalc {
5
6
7
8     public static void main(String[] args) {
9         // List of integers
10        List<Integer> numbers = Arrays.asList(1,2,3,4,5);
11
12        // Calculating the average using streams
13        OptionalDouble average = numbers.stream()
14            .mapToInt(Integer::intValue)
15            .average();
16
17        // Checking if a value is present and printing the average
18        if (average.isPresent()) {
19            System.out.println("The average is: " + average.getAsDouble());
20        } else {
21            System.out.println("The list is empty, no average to calculate.");
22        }
23    }
24 }
25 }
```

The console output shows:

```
<terminated> AvgCalc (1) [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (08-Jun-2024, 3:33:36 pm - 3:33:37 pm) [pid: 24176]
The average is: 3.0
```

Task 5 : Write a Java program to convert a list of strings to uppercase or lowercase using streams.

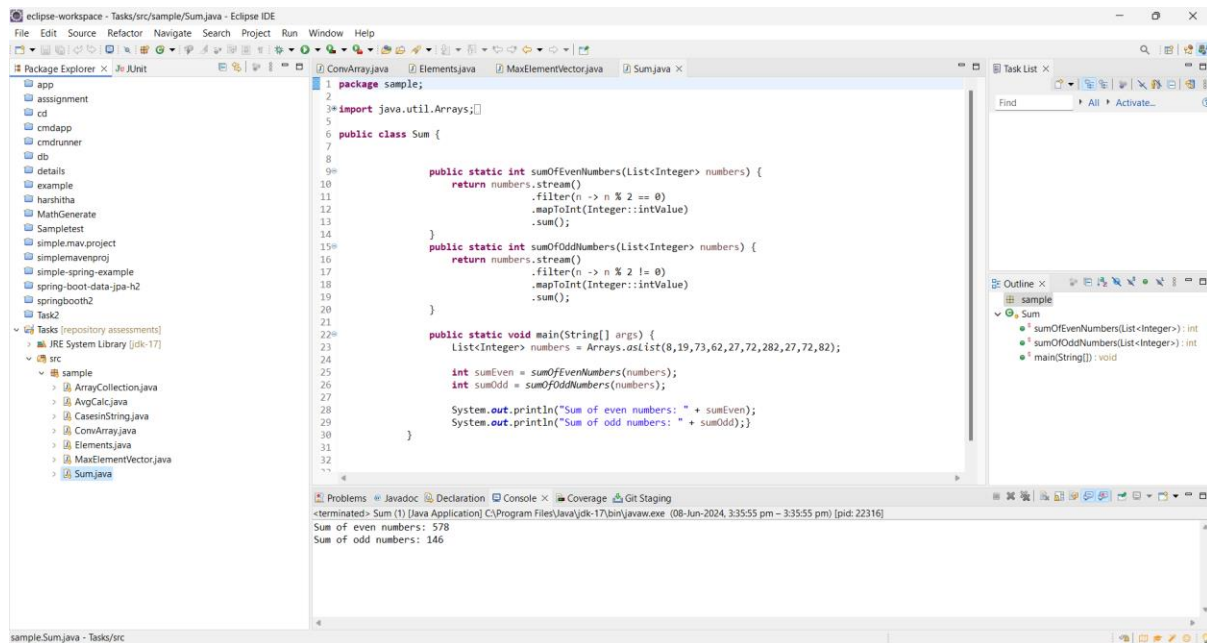


The screenshot shows the Eclipse IDE with a Java project named 'sample'. The main editor displays the file 'CasesinString.java'. The code defines a class 'CasesinString' with two static methods: 'toUpperCase' and 'toLowerCase', both using Java Streams to process a list of strings. The 'main' method initializes a list of strings and calls both static methods, printing the results. The Package Explorer on the left shows the project structure, and the Outline view on the right shows the class structure. The Console at the bottom shows the output of the program.

```
1 package sample;
2
3 import java.util.Arrays;
4
5 public class CasesinString {
6
7
8
9
10
11     public static List<String> toUpperCase(List<String> strings) {
12         return strings.stream()
13             .map(String::toUpperCase)
14             .collect(Collectors.toList());
15     }
16     public static List<String> toLowerCase(List<String> strings) {
17         return strings.stream()
18             .map(String::toLowerCase)
19             .collect(Collectors.toList());
20     }
21
22     public static void main(String[] args) {
23         List<String> strings = Arrays.asList("harshitha", "JAVA", "welcome");
24
25         List<String> upperCaseStrings = toUpperCase(strings);
26         System.out.println("Uppercase: " + upperCaseStrings);
27
28         List<String> lowerCaseStrings = toLowerCase(strings);
29         System.out.println("Lowercase: " + lowerCaseStrings);
30     }
31 }
32
33
```

Uppercase: [HARSHITHA, JAVA, WELCOME]
Lowercase: [harshitha, java, welcome]

Task 6 : Write a Java program to calculate the sum of all even, odd numbers in a list using streams.



Task 7: Write a Java program to find the maximum and minimum values in a list of integers using streams.

