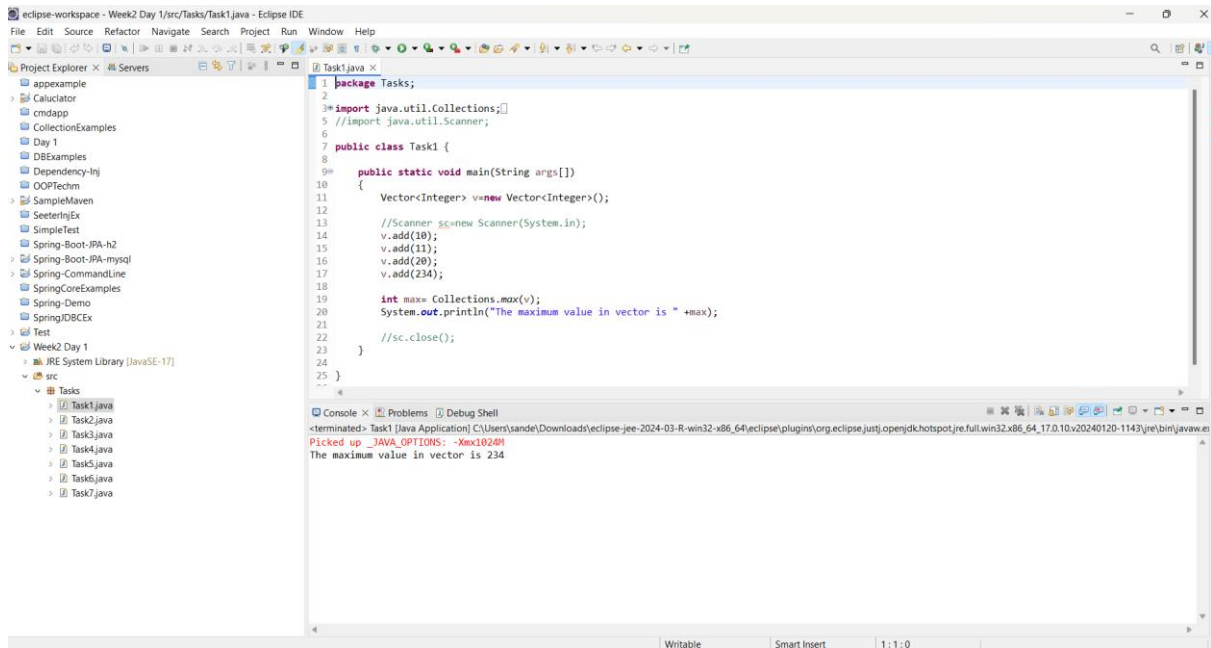


Task 1



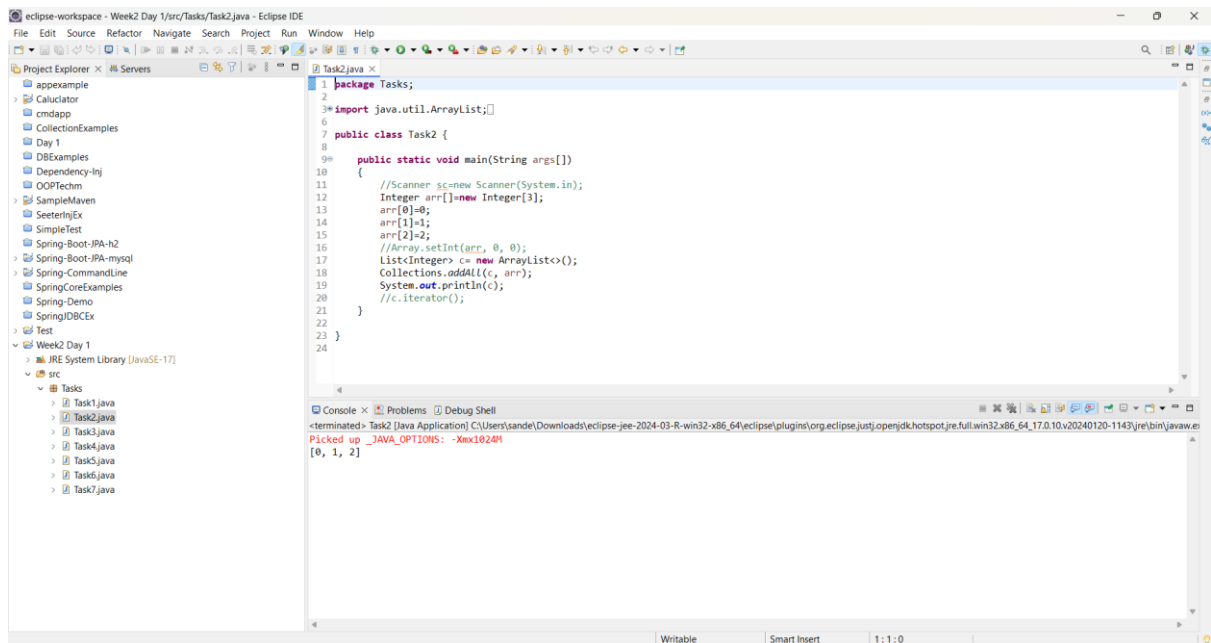
The screenshot shows the Eclipse IDE with the 'Task1.java' file open. The code defines a 'Task1' class with a 'main' method that uses a 'Vector' to store numbers and prints the maximum value. The console output shows the program terminated successfully and printed 'The maximum value in vector is 234'.

```
1 package Tasks;
2
3 import java.util.Collections;
4 //import java.util.Scanner;
5
6 public class Task1 {
7
8     public static void main(String args[])
9     {
10         Vector<Integer> v=new Vector<Integer>();
11
12         //Scanner sc=new Scanner(System.in);
13         v.add(10);
14         v.add(11);
15         v.add(20);
16         v.add(234);
17
18         int max= Collections.max(v);
19         System.out.println("The maximum value in vector is " +max);
20
21         //sc.close();
22     }
23 }
24
25 }
```

Console Output:

```
<terminated> Task1 [Java Application] C:\Users\sande\Downloads\eclipse-jee-2024-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.10.v20240120-1143\jre\bin\javaw.exe
Picked up _JAVA_OPTIONS: -Xmx1024M
The maximum value in vector is 234
```

Task 2



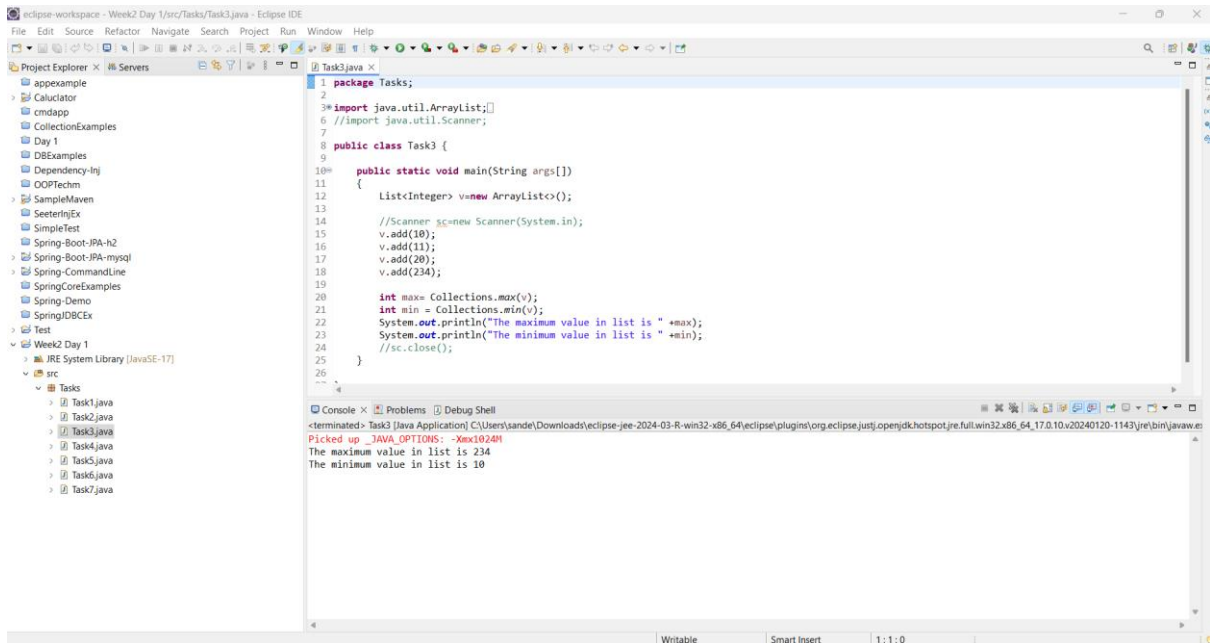
The screenshot shows the Eclipse IDE with the 'Task2.java' file open. The code defines a 'Task2' class with a 'main' method that uses an 'ArrayList' to store numbers and prints the first three elements. The console output shows the program terminated successfully and printed '[0, 1, 2]'.

```
1 package Tasks;
2
3 import java.util.ArrayList;
4
5 public class Task2 {
6
7     public static void main(String args[])
8     {
9         //Scanner sc=new Scanner(System.in);
10         Integer arr[]=new Integer[3];
11         arr[0]=0;
12         arr[1]=1;
13         arr[2]=2;
14         //Array.setInt(arr, 0, 0);
15         List<Integer> c= new ArrayList<>();
16         Collections.addAll(c, arr);
17         System.out.println(c);
18         //c.iterator();
19     }
20 }
21
22 }
23
24 }
```

Console Output:

```
<terminated> Task2 [Java Application] C:\Users\sande\Downloads\eclipse-jee-2024-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.10.v20240120-1143\jre\bin\javaw.exe
Picked up _JAVA_OPTIONS: -Xmx1024M
[0, 1, 2]
```

Task 3



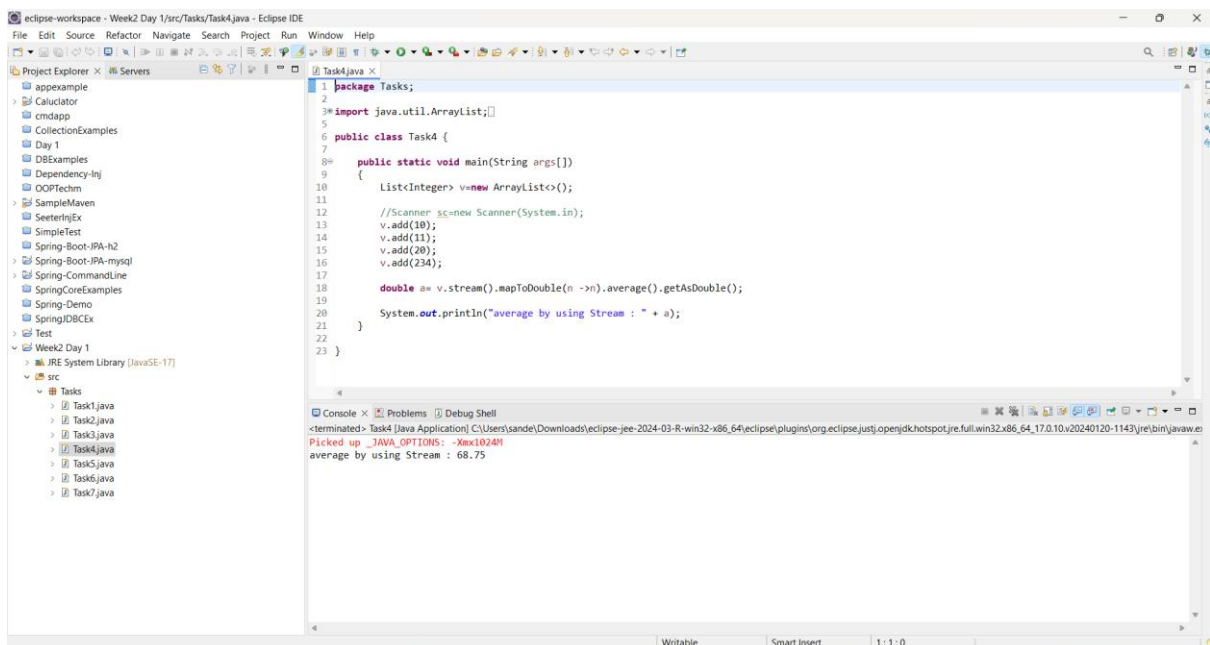
The screenshot shows the Eclipse IDE with a project named 'Task3'. The 'Task3.java' file is open, showing the following code:

```
1 package Tasks;
2
3 import java.util.ArrayList;
4
5 import java.util.Scanner;
6
7 public class Task3 {
8
9     public static void main(String args[])
10     {
11         List<Integer> v=new ArrayList<>();
12
13         //Scanner sc=new Scanner(System.in);
14         v.add(10);
15         v.add(11);
16         v.add(20);
17         v.add(234);
18
19         int max= Collections.max(v);
20         int min = Collections.min(v);
21         System.out.println("The maximum value in list is " +max);
22         System.out.println("The minimum value in list is " +min);
23         //sc.close();
24     }
25
26 }
```

The console output shows the following message:

```
<terminated> Task3 [Java Application] C:\Users\sande\Downloads\eclipse-jee-2024-03-R-win32-x86_64\ eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.10.v20240120-1143\jre\bin\javaw.exe
Picked up _JAVA_OPTIONS: -Xmx1024M
The maximum value in list is 234
The minimum value in list is 10
```

Task 4



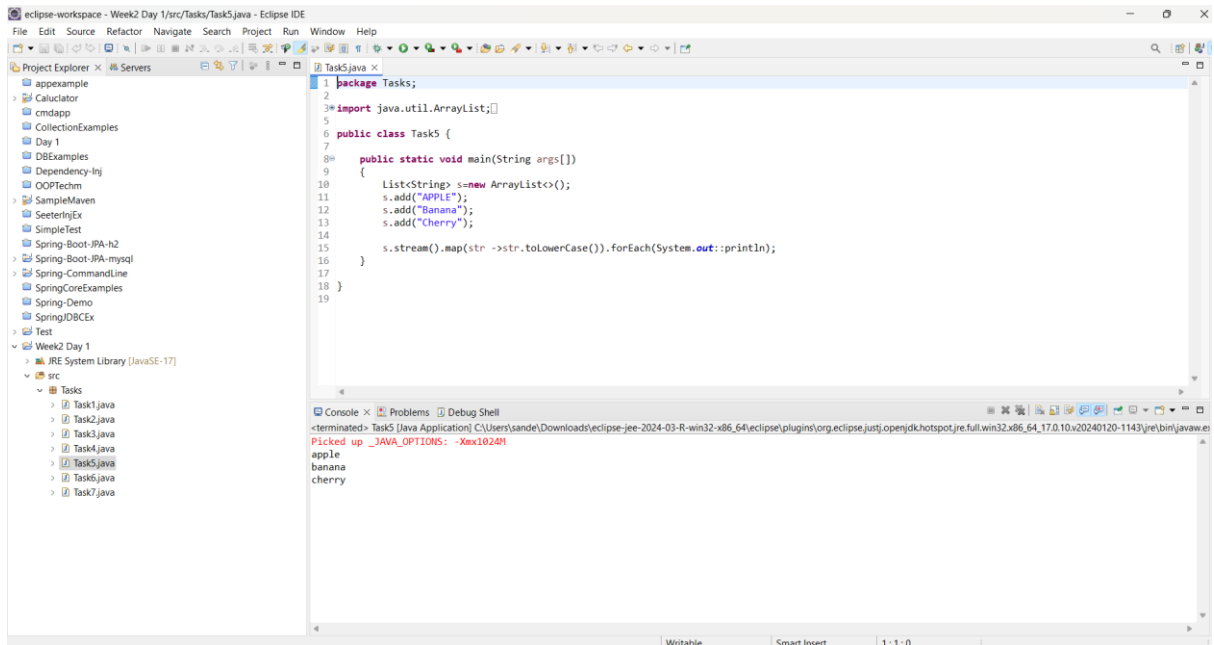
The screenshot shows the Eclipse IDE with a project named 'Task4'. The 'Task4.java' file is open, showing the following code:

```
1 package Tasks;
2
3 import java.util.ArrayList;
4
5 public class Task4 {
6
7     public static void main(String args[])
8     {
9         List<Integer> v=new ArrayList<>();
10
11         //Scanner sc=new Scanner(System.in);
12         v.add(10);
13         v.add(11);
14         v.add(20);
15         v.add(234);
16
17         double a= v.stream().mapToDouble(n ->n).average().getAsDouble();
18
19         System.out.println("average by using Stream : " + a);
20     }
21
22 }
```

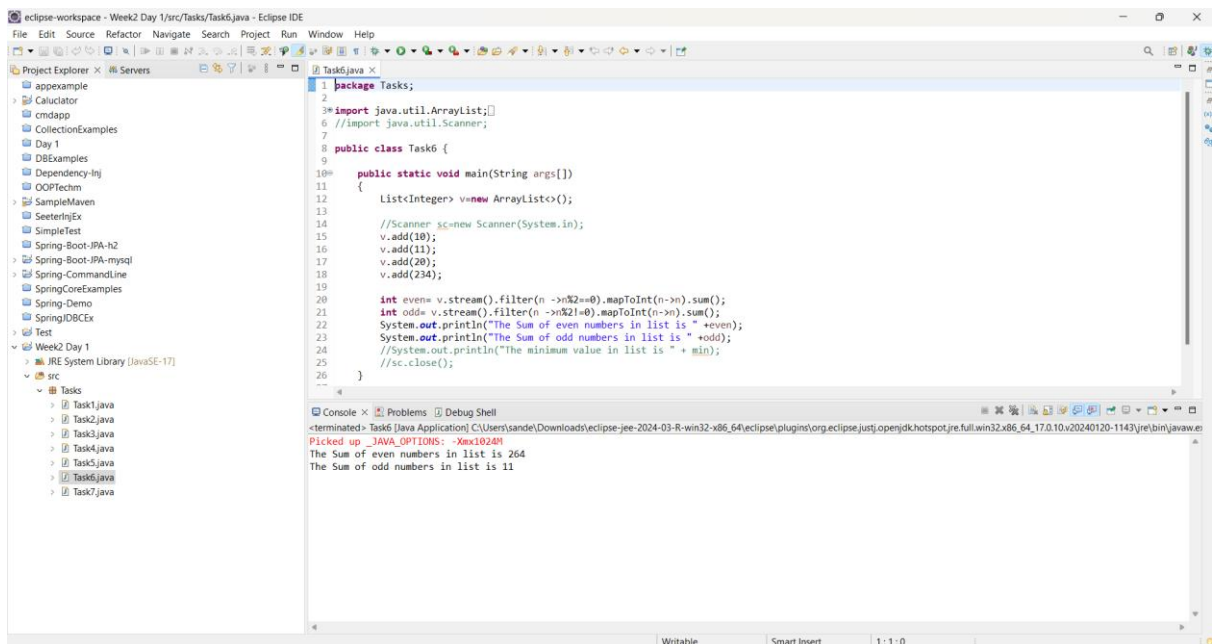
The console output shows the following message:

```
<terminated> Task4 [Java Application] C:\Users\sande\Downloads\eclipse-jee-2024-03-R-win32-x86_64\ eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.10.v20240120-1143\jre\bin\javaw.exe
Picked up _JAVA_OPTIONS: -Xmx1024M
average by using Stream : 68.75
```

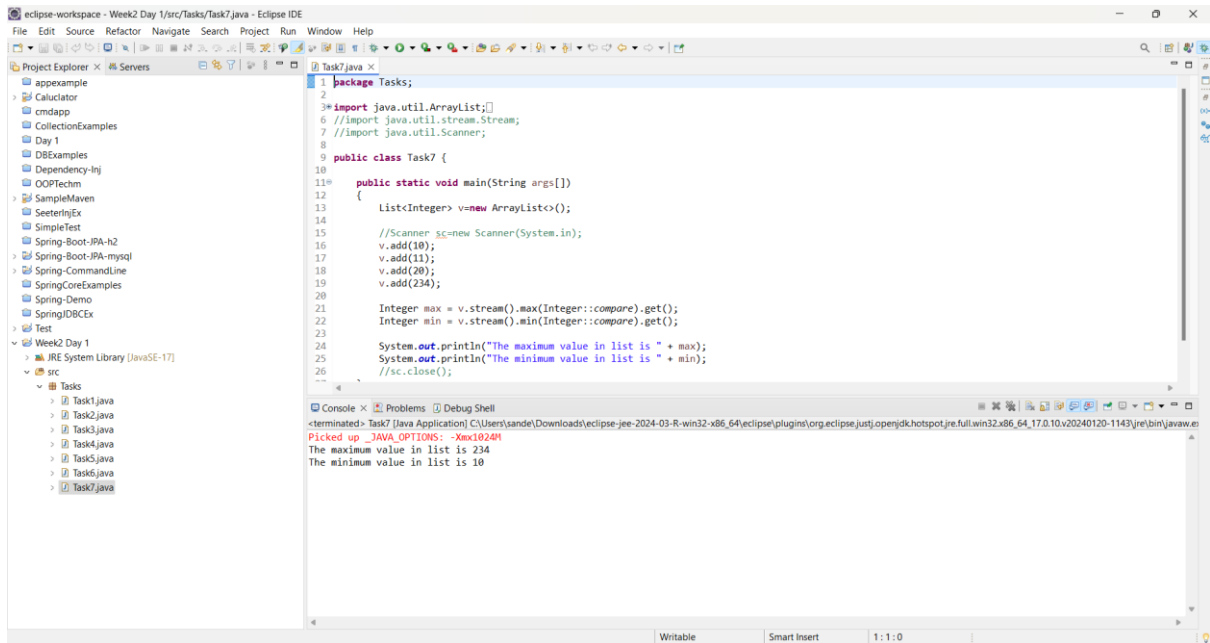
Task 5



Task 6



Task 7



The screenshot shows the Eclipse IDE interface. The Project Explorer on the left displays a project structure with a 'Tasks' folder containing 'Task1.java' through 'Task7.java'. The main editor window shows the code for 'Task7.java'. The code defines a 'Tasks' package, imports 'java.util.ArrayList', and creates a 'Task7' class with a 'main' method. The 'main' method initializes an 'ArrayList' with values 10, 11, 20, and 234, then uses 'stream()' to find the maximum and minimum values in the list. The console output at the bottom shows the program's execution, displaying the maximum value as 234 and the minimum value as 10.

```
1 package Tasks;
2
3 import java.util.ArrayList;
4 //import java.util.stream.Stream;
5 //import java.util.Scanner;
6
7 public class Task7 {
8
9     public static void main(String args[])
10     {
11         List<Integer> v=new ArrayList<>();
12
13         //Scanner sc=new Scanner(System.in);
14         v.add(10);
15         v.add(11);
16         v.add(20);
17         v.add(234);
18
19         Integer max = v.stream().max(Integer::compare).get();
20         Integer min = v.stream().min(Integer::compare).get();
21
22         System.out.println("The maximum value in list is " + max);
23         System.out.println("The minimum value in list is " + min);
24         //sc.close();
25     }
26 }
```

Console Output:

```
<terminated> Task7 [Java Application] C:\Users\sande\Downloads\eclipse-jee-2024-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justi.openjdk hotspot.jre.full.win32.x86_64.17.0.10.v20240120-1143\jre\bin\javaw.exe
Picked up _JAVA_OPTIONS: -Xmx1024M
The maximum value in list is 234
The minimum value in list is 10
```