

The screenshot shows a Java IDE interface with two main panes. The left pane is a code editor titled "ParallelUniverseExplorer.java" containing 35 lines of Java code. The right pane is a terminal window titled "Console" showing the output of the application's execution.

**Code Editor (ParallelUniverseExplorer.java):**

```
1 package assignments;
2 import java.util.*;
3 import java.util.concurrent.ForkJoinPool;
4 public class ParallelUniverseExplorer {
5     private static final ForkJoinPool pool = new ForkJoinPool();
6     private static final List<String> sequentialTimeline = List.of(
7         "Big Bang",
8         "Formation of Galaxies",
9         "Birth of Solar System",
10        "Origin of Life",
11        "Human Civilization"
12    );
13    public static void main(String[] args) {
14        System.out.println("Starting Sequential Timeline Exploration...\n");
15        exploreSequentialTimeline();
16        System.out.println("\nSequential Exploration Completed.");
17    }
18    private static void exploreSequentialTimeline() {
19        sequentialTimeline.stream()
20            .forEach(event -> {
21                System.out.println("Exploring Event : " + event);
22                System.out.println("Thread Name      : " + Thread.currentThread().getName());
23                simulateTask();
24                System.out.println("-----");
25            });
26    }
27    private static void simulateTask() {
28        try {
29            Thread.sleep(2000); // simulate processing time
30        } catch (InterruptedException e) {
31            Thread.currentThread().interrupt();
32        }
33    }
34 }
35 }
```

**Console Output:**

```
<terminated> ParallelUniverseExplorer [Java Application] C:\Program F
Starting Sequential Timeline Exploration...

Exploring Event : Big Bang
Thread Name      : main
-----
Exploring Event : Formation of Galaxies
Thread Name      : main
-----
Exploring Event : Birth of Solar System
Thread Name      : main
-----
Exploring Event : Origin of Life
Thread Name      : main
-----
Exploring Event : Human Civilization
Thread Name      : main
-----
Sequential Exploration Completed.
```