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Programming Challenge – Priority Queue - Numbers:

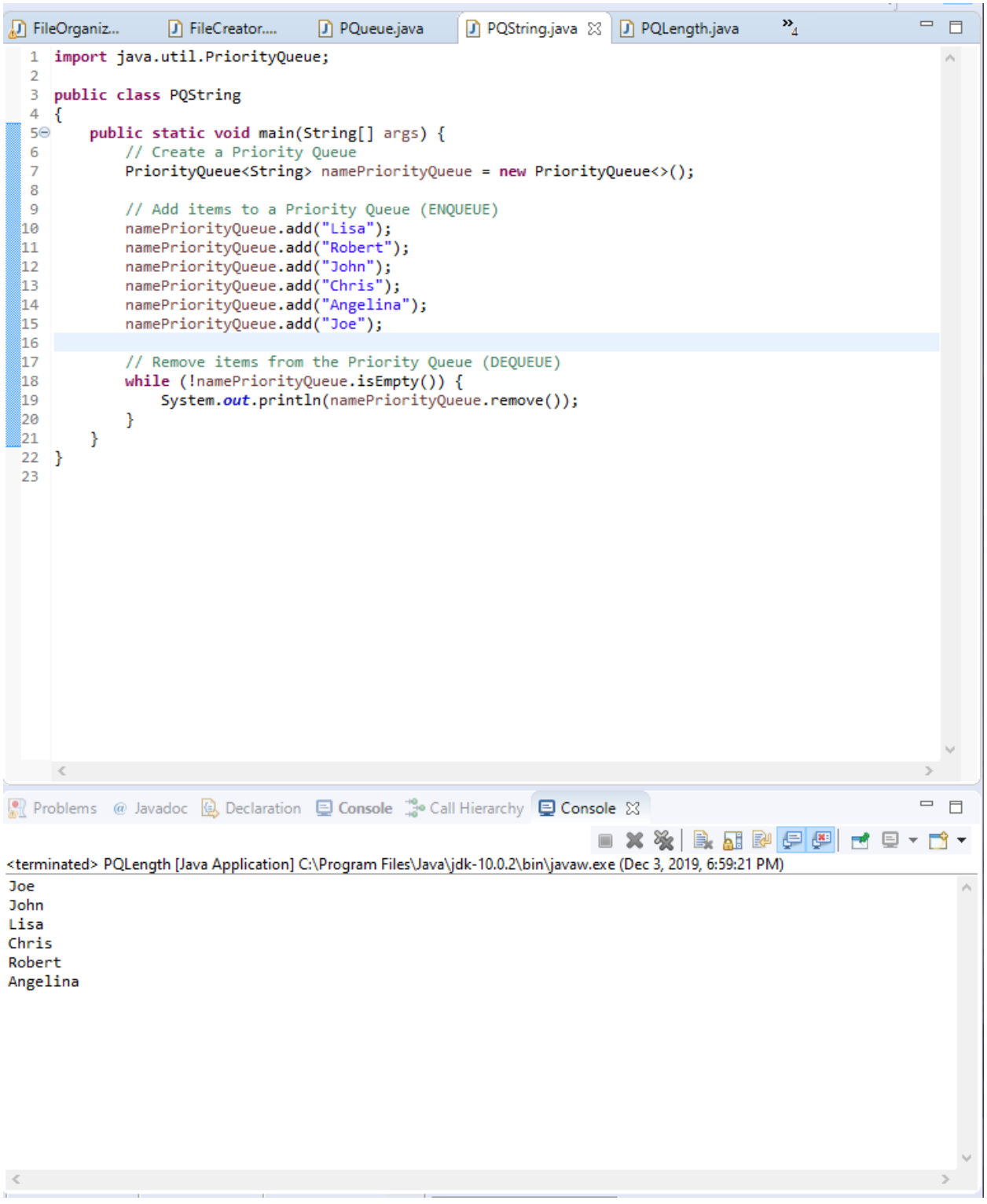
FileOrganiz... FileCreator.... PQueue.java PQString.java PQLength.java

```java
import java.util.PriorityQueue;

public class PQueue
{

    public static void main(String[] args)
    {
        // Create a Priority Queue
        PriorityQueue<Integer> numbers = new PriorityQueue<>();

        // Add items to a Priority Queue (ENQUEUE)
        numbers.add(750);
        numbers.add(500);
        numbers.add(900);
        numbers.add(100);

        // Remove items from the Priority Queue (DEQUEUE)
        while (!numbers.isEmpty()) {
            System.out.println(numbers.remove());
        }
    }
}
```

Problems Javadoc Declaration Console Call Hierarchy Console

```
<terminated> PQLength [Java Application] C:\Program Files\Java\jdk-10.0.2\bin\javaw.exe (Dec 3, 2019, 6:59:21 PM)
Joe
John
Lisa
Chris
Robert
Angelina
```

Programming Challenge – Priority Queue - Strings:



Programming Challenge – Priority Queue - Custom Comparator:

FileOrganiz... FileCreator.... PQueue.java PQString.java PQLength.java

```java
import java.util.Comparator;
import java.util.PriorityQueue;

public class PQLength {

    public static void main(String[] args) {
        // A custom comparator that compares two Strings by their length.
        Comparator<String> stringLengthComparator = new Comparator<String>() {
            @Override
            public int compare(String s1, String s2) {
                return s1.length() - s2.length();
            }
        };

        // Create a Priority Queue with a custom Comparator
        PriorityQueue<String> namePriorityQueue = new PriorityQueue<>(stringLengthComparator);

        // Add items to a Priority Queue (ENQUEUE)
        namePriorityQueue.add("Lisa");
        namePriorityQueue.add("Robert");
        namePriorityQueue.add("John");
        namePriorityQueue.add("Chris");
        namePriorityQueue.add("Angelina");
        namePriorityQueue.add("Joe");

        // Remove items from the Priority Queue (DEQUEUE)
        while (!namePriorityQueue.isEmpty()) {
            System.out.println(namePriorityQueue.remove());
        }
    }

}
```

Problems Javadoc Declaration Console Call Hierarchy Console

<terminated> PQLength [Java Application] C:\Program Files\Java\jdk-10.0.2\bin\javaw.exe (Dec 3, 2019, 6:59:21 PM)

```
Joe
John
Lisa
Chris
Robert
Angelina
```