Write a Java program to create three threads in parallel and display the natural numbers in orders using sleep() method.

CODE:

import java.util.Scanner;

class NaturalNumbersPrinter extends Thread {

private int start;

private int end;

public NaturalNumbersPrinter(int start, int end) {

this.start = start;

this.end = end;

}

@Override

public void run() {

for (int i = start; i <= end; i++) {

System.out.println(Thread.currentThread().getName() + ": " + i);

try {

// Sleep for 300 milliseconds to simulate parallel execution

Thread.sleep(300);

} catch (InterruptedException e) {

e.printStackTrace();

}

}

}

}

public class NaturalNums{

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter the range of natural numbers (start end): ");

int start = scanner.nextInt();

int end = scanner.nextInt();

// Create three threads to print natural numbers

Thread thread1 = new NaturalNumbersPrinter(start, end);

Thread thread2 = new NaturalNumbersPrinter(start, end);

Thread thread3 = new NaturalNumbersPrinter(start, end);

// Start the threads

thread1.start();

thread2.start();

thread3.start();

scanner.close(); // Closing the scanner object

}

}

OUTPUT:

C:\javap>javac NaturalNums.java

C:\javap>java NaturalNums

Enter the range of natural numbers (start end): 26

30

Thread-0: 26

Thread-2: 26

Thread-1: 26

Thread-1: 27

Thread-2: 27

Thread-0: 27

Thread-1: 28

Thread-2: 28

Thread-0: 28

Thread-2: 29

Thread-0: 29

Thread-1: 29

Thread-0: 30

Thread-2: 30

Thread-1: 30

