2. Write a program in Java to demonstrate sleep() and wait()

//Using Sleep()

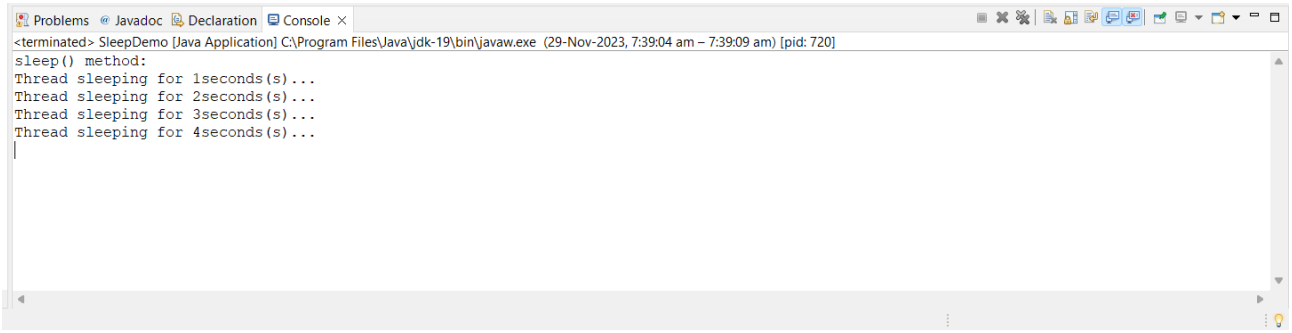
```
package AssistedPracticeProject;

public class SleepDemo {

	public static void main(String[] args) {


			System.out.println( "sleep() method:");
			for(int i=1;i<=4;i++) {
			try {
			    System.out.println("Thread sleeping for "+ i
+"seconds(s)...");
			    Thread.sleep(i*500);
			}
			catch(InterruptedException e) {
			e.printStackTrace();
			}
		}
	}
}
```

Output:



//Using wait()

```
package AssistedPracticeProject;

public class WaitDemo {
	public static void main(String[] args) {

		System.out.println( "Wait() method:");
		Object lock=new Object();
		Thread t1=new Thread(new Runnable() {
		public void run() {
			synchronized (lock) {
			    System.out.println("Thread 1 waiting...");
			    try {
			        lock.wait();
			    } catch (InterruptedException e) {
			        e.printStackTrace();
			     }
```

```
                        System.out.println("Thread 1 resumed...");
                        }
                    }
                });

            Thread t2=new Thread(new Runnable() {
                public void run() {
                    synchronized (lock) {
                        System.out.println("Thread 2 notifying...");
                            lock.notify();
                        }
                    }
                });
                    t1.start();
                    t2.start();
        }

}
```

Output: