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

SOURCE CODE

```
//demonstrating wait() and show()
package assistedPracticeProject2;
import java.lang.*; //importing packages
public class Practice_Project2
              //creating object waitthread
              static Object waitthread = new Object();
              public static void main(String args[]) throws InterruptedException
                     //get name of the current thread
                     String str=Thread.currentThread().getName();
                     //displaying thread name
                     System.out.println("THREAD NAME = "+str);
                     System.out.println(str +" SLEEPING FOR 4 SECEOND");
                     Thread.sleep(4000); //sleeping for 4 sec
                     System.out.println(str +" WOKEN UP AFTER 4 SECOND");
                     synchronized(waitthread) //synchronized() to handle wait()
                     {
                            System.out.println("\nTHREAD WAITING FOR IO
DEVICES");
                            waitthread.wait(2000); //waiting for 2 sec
                     }
                     System.out.println("THREAD WOKEN UP AFTER WAITING 2
SECOND");
              }
}
```

OUTPUT

```
<terminated> Practice_Project2 [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclip
THREAD NAME = main
main SLEEPING FOR 4 SECEOND
main WOKEN UP AFTER 4 SECOND

THREAD WAITING FOR IO DEVICES
THREAD WOKEN UP AFTER WAITING 2 SECOND
```