```
 1 import java.io.*;
 2 import java.util.*;
 3
 4
 5 public class Jordan {
 6     public static void main(String[] args)throws
   IOException {
 7         Scanner scan = new Scanner(new File("
   jordan.dat"));
 8         int n = scan.nextInt();
 9         while(n-->0){
10             // bring in inputs need long
11             long begin = Long.parseLong(scan.next
   (),17);
12             long end = Long.parseLong(scan.next
   (),17);
13             long goal = Long.parseLong(scan.next
   (),17);
14             int index = 2;//we know the answer
   will be greater than the second element
15             long val = end+begin;
16             //plan is to keep finding a new
   interval until goal == val or goal < val
17             while(2*goal>=val){
18                 if(goal==val) {
19                     System.out.println(Long.
   toString(index+1));
20                    break; //OK ugly but it works
   , probably better to ajdust the while condition
21                 }
22                 else if (goal<val){
23                     System.out.println(Long.
   toString(end,17).toUpperCase()+" "+Long.toString(
   val,17).toUpperCase());
24                     break;
25                     }
26                 //make the next interval with the
    coveted swap op
```

```
27                      long temp = val;
28                      val =val+end;
29                      end = temp;
30                      index++;
31                  }
32
33                  }
34              }
35  }
36
```