

# Problem B Blockly

Time limit: 2 seconds Memory limit: 512 megabytes

#### **Problem Description**

Your lord, Lucifer, kidnaps Perly Princess and wants to occupy the kingdom. However, an epic hero, Blockly, will obstruct Lucifer's plan and rescue Perly Princess.

To prevent Blockly from saving Perly Princess. You have to create a magical Hydra with H heads and T tails. You can use four types of operations listed below.

- 1. Add 3 heads.
- 2. Exchange 2 heads for 3 tails. You may use this operation only when the magical has 2 or more heads.
- 3. Exchange 1 tails for 2 heads. You may use this operation only when the magical has at least 1 tail.
- 4. Cut off 2 tails. You may use this operation only when the magical has 2 or more tails.

You have an embryo of a magical Hydra with 0 heads and 0 tails. You want to know how many operations are needed to create a magical Hydra with H heads and T tails.

### **Input Format**

The input contains only two non-negative integers H and T indicating that you need to create a magical Hydra with H heads and T tails.

## **Output Format**

Output the minimum number of operations to create the desired magical Hydra.

### **Technical Specification**

- $0 \le H \le 100$
- $0 \le T \le 100$

Sample Input 1	Sample Output 1
1 1	3
Sample Input 2	Sample Output 2