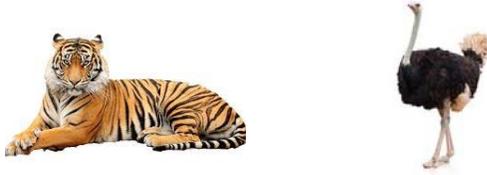




Problem K. The Zoo

Today, Khoa went to the big zoo in Da Nang city. Khoa is very interested in tigers and ostriches. He asked a zookeeper how many tigers and ostriches in the zoo. The zookeeper answered, “Among the animals there are n eyes and m feet.”

How many of each kind of animal were there?



Input

The input contains two positive integers n ($1 \leq n \leq 10^{15}$) and m ($1 \leq m \leq 10^{15}$).

Output

The output contains the number of tigers and ostriches. If there is no solution, output the only word “IMPOSSIBLE”.

Examples

Standard Input	Standard Output
6 10	2 1
10 8	IMPOSSIBLE