Problem PYRAMIDS: Pyramids

The Illuminati have decided to finally leave the years of secrecy behind. They want to demonstrate their might by erecting pyramids at various points of interests all over the world. Local groups take care of the planning and the construction of these tokens of power, hence they have some liberties in their design. Naturally, there is but one global constraint for the pyramids: They must have a certain size to qualify as an expression of the enlightened group's might. Hence, all pyramid plans must be verified by Bob the Builder, the group's newly appointed lead pyramid construction manager.

For each pyramid, Bob has to review the side length a of the square base area and the height h (both in meters), as these values determine the volume of the pyramid. All pyramids with a volume of less than $23\,000m^3$ are deemed unworthy and must be rejected. As the number of planned pyramids grows into the hundreds, Bob asked you for help to automatically review the plans.

Input

One line with the integer numbers a and h with $42 \le a, h \le 1000$.

Output

Print one line of output containing "worthy" if the volume of the specified pyramid is at least $23\,000m^3$. Print "rejected" if the pyramid is too small and gets rejected.

Sample Input 1

Sample Output 1

1000 1000

worthy