

17 Sator Arepo

9 points



Introduction

The five words SATOR, AREPO, TENET, OPERA, and ROTAS form a known lettered magic square.



When it is read horizontally (backwards and forwards) and vertically (up and down) it always forms the same palindrome:

SATORAREPOTENETOPERAROTAS

It was written in Latin and was found for the first time signed up in the ruins of Pompeii on a column from the 1st century AD. Since its discovery, it was found in many ancient tombs and temples. Some people have attributed magical properties to it, considering it one of the broadest magical formulas in the West.

We would like to have a program to detect lettered magic squares like Sator Arepo. Can you help us?

Input

The input consists of five words of five characters in different lines

Output

A string describing the input as "Magic Square like Sator Arepo" or "Not a Magic Square"

Example 1

Input

SATOR
AREPO
TENET
OPERA
ROTAS

Output

Magic Square like Sator Arepo

Example 2

Input

HELLO
PATER
SILLY
JIMMY
BUZZY

Output

Not a Magic Square