

Mystery Word Decoder - Challenge Puzzle

Problem Statement:

You're given a 10-letter decoded word, which is the result of a special decoding rule applied to a 5×5 grid of letters.

The grid is read using the following decoding rule:

- ★ From the left side of the grid:
 - Extract characters at positions: $(0,0) \rightarrow (1,1) \rightarrow (2,1) \rightarrow (3,1) \rightarrow (4,0)$ and Reverse this list.
- ★ From the right side of the grid:
 - Extract characters at positions: $(0,4) \rightarrow (1,3) \rightarrow (2,3) \rightarrow (3,3) \rightarrow (4,4)$ and Reverse this list.
- ★ Concatenate both reversed parts to form the decoded 10-letter word.

WORD	ABSOLUTELY
5 x 5 GRID	L A B C Y D O E L F G S G E J K B L T M A P Q R U
DECODING PROCESS	Left path: L O S B A \rightarrow reversed \rightarrow A B S O L Right path: Y L E T U \rightarrow reversed \rightarrow U T E L Y Decoded Word = " ABSOLUTELY "

TASK 1: You are given 10 decoded words.

#	Decoded Word
1	ABSOLUTELY
2	BROADCASTS
3	CAFETERIAS
4	DAYDREAMER
5	EAVESDROPS
6	FABULOUSLY
7	GROUNDWORK
8	HACKATHONS
9	IDENTIFIER
10	JUSTIFIERS

Find one possible 5×5 input grid for each word, such that applying the decoding rule described above reproduces the word.

Task 2: Write a Python code that verifies your grid produces the decoded word.

Task 3: Push your code to your GitHub profile.
