ACSL STICKLINKS

PROBLEM: Terry Stickles is the author of many game and puzzle books. His latest game is Sticklinks. The object of the game is to find a hidden word in a square grid of letters. The letters in the hidden words are adjacent to each other (vertical, horizontal or diagonal). Each letter can be used only once in each word. The word MONEY is in the table below. The letters are in italics.

	1	2	3	4	5
5	A	H	I	Y	P
4	G	*Y*	M	E	Q
3	*E*	F	C	L	B
2	*N*	*M*	K	N	R
1	D	*O*	J	O	S

INPUT: There will be 11 input lines. The first line will contain N strings representing the N rows of the square grid. The next 10 input lines will contain the hidden words.

OUTPUT: For each input line with a hidden word, print all the letter locations of the hidden word in the order they appear in the word. If the word is not there, print NOT THERE.

SAMPLE INPUT   **SAMPLE OUTPUT**

1. DOJOS, NMKNR, EFCLB, GYMEQ, AHIYP
2. MONEY   1. 2,2 1,2 2,1 3,1 4,2
3. AGE   2. 5,1 4,1 3,1
4. DONKEY   3. NOT THERE

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TEST DATA

TEST INPUT

1. ATLATS, TSDIZO, VHATES, YLEIRN, OENLOT, CALEVS
2. HATES
3. LOTS
4. RETAILS
5. LIONS
6. STORE
7. SLATS
8. HAIR
9. COAL
10. LEADS
11. STAID

	1	2	3	4	5	6
6	C	A	L	E	V	S
5	O	E	N	L	O	T
4	Y	L	E	I	R	N
3	V	H	A	T	E	S
2	T	S	D	I	Z	O
1	A	T	L	A	T	S

TEST OUTPUT

1. 3,2 3,3 3,4 3,5 3,6
2. 5,4 5,5 5,6 6,6
3. 4,5 3,5 3,4 3,3 2,4 1,3 2,2
4. NOT THERE
5. 5,4 4,4 5,5 4,6 3,6
6. 6,6 5,6 5,5 4,5 3,5
7. 2,2 1,3 1,4 1,5 1,6
8. 3,2 3,3 4,4 4,5
9. 6,1 5,1 6,2 6,3
10. 4,2 4,3 3,3 2,3 2,2
11. 1,6 1,5 1,4 2,4 2,3