Decipher the AMSCO cipher

Here you have to decipher the AMSCO cipher :

Due to A.M.SCOtt in the 19th century, **it's an incomplete columnar transposition cipher with alternating single letters and digraphs**. The first entry must be a digraph.
In both even and odd periods the first column and the first row always alternate:

7	4	5	6	3	2	1
RI	D	ER	S	ON	T	HE
S	TO	R	MI	N	TO	T
HI	S	HO	U	SE	W	EA
R	EB	O	RN	J	IM	M
OR	R	IS	O	N		

Input

N lines (N<1000)
Each line of the input contains the numeric key (permutation order of the columns) and a ciphertext. Ciphertext letters are in [A-Z] only with no punctuation.
The keylength max is 9 and the length of the ciphertext is limited to 250.
The last line ends with EOF.

Output

Output consist of exactly N lines of plaintexts with letters in [A-Z] with no spaces.

Example 1:

Input:
7456321 HETEAMTTOWIMONNSEJNDTOSEBRERRHOOISSMIURNORISHIROR
Output:
RIDERSONTHESTORMINTOTHISHOUSEWEAREBORNJIMMORRISON

Example 2:

Input:
41325 CECRTEGLENPHPLUTNANTEIOMOWIRSITDDSINTNALINESAALEMHATGLRGR
Output:
INCOMPLETECOLUMNARWITHALTERNATINGSINGLELETTERSANDDIGRAPHS