

Remorseful Sam

Sam Morose served for many years as communications officer aboard the U.S.S. Dahdit, a U.S. Coast Guard frigate deployed in the South Pacific. Sam never quite got over the 1995 decision to abandon Morse code as the primary ship-to-shore communication scheme, and was forced to retire soon after because of the undue mental anguish that it was causing. After leaving the Coast Guard, Sam landed a job at the local post office, and became a model U.S. Postal worker... That said, it isn't surprising that Sam is now holding President Clinton hostage in a McDonald's just outside the beltway. The FBI and Secret Service have been trying to bargain with Sam for the release of the president, but they find it very difficult since Sam refuses to communicate in anything other than Morse code. Janet Reno has just called you to write a program that will interpret Sam's demands in Morse code as English. Morse code represents characters of an alphabet as sequences of dits (short key closures) and dahs (longer key closures). If we let a period (.) represent a dit and a dash (-) represent a dah, then the Morse code version of the English alphabet is

A	. -	G	-- .	M	--	S	...	Y	-. --
B	- ...	H	N	- .	T	-	Z	-- ..
C	- . - .	I	..	O	---	U	.. -		
D	- . .	J	. ---	P	. - - .	V	... -		
E	.	K	- . -	Q	-- . -	W	. - -		
F	.. - .	L	. - . .	R	. - .	X	- . . -		

Input: Your program reads in lines of Morse code from the console representing messages composed only of the English alphabet as specified above. Each line is guaranteed to have at least one encoded alphabet character on it. One blank space is used to separate letters and three blanks are used to separate words. The last line has five dashes on it to single the end of the input stream.

Output: Your program must direct its output to the screen and must be the English interpretation of the Morse code of each line. There must be no blanks between letters in the output and only one blank between words. You must use all capital letters in the output.

Example Input:

```
.... . .-... .-. .-. -- -- -. -.- - . .- - . . . . . . .- -  
-.- -.- .-. -. . .- -.- -. -.- .- . .  
.... .  
-----
```

Example Output

```
HELLO MY NAME IS SAM  
COFC ROCKS  
HI
```