Morse code, developed in 1832 by Samuel Morse, is one of the most famous of all coding schemes ever developed. Morse code assigns a series of dots and dashes to each letter of the alphabet, each digit, and a few other punctuation characters. The international version of Morse code for alphabetic characters and digits is shown in the table below.

Character	code	Character	code
A	.-	T	-
B	-...	U	..-
C	-.-.	V	...-
D	-..	W	.--
E	.	X	-..-
F	..-.	Y	-.--
G	--.	Z	--..
H	....		
I	..	Digits	
J	.---	1	.----
K	-.-	2	..---
L	.-..	3	...--
M	--	4	....-
N	-.	5	.....
O	---	6	-....
P	.--.	7	--...
Q	--.-	8	---..
R	.-.	9	----.
S	…	0	-----

This project involves writing a program to translate Morse code into English and English into Morse code. Your program shall prompt the user to specify the desired type of translation, input a string of Morse code characters or English characters, then display the translated results. The Morse code pattern and English letter translations must be kept and processed using either two one-dimensional or one two-dimensional arrays.

When you input Morse code, separate each letter/digit with a single space, and delimit multiple words with a “|”. For example, **- --- | -… .** would be the Morse code input for the sentence “to be”. Your program only needs to handle a single sentence and can ignore punctuation symbols.

When you input English, separate each word with a blank space.