☆ ASCII-Encoded Strings

Many simple encoding methods have been devised over the years. A common method having to do with computing is the ASCII character set used to display characters on the screen. Each character is given a numeric value which can be interpreted by the computer.

In this challenge, you will be given a string to decode. An example of an encoded string follows. The table below shows the conversion from the string *Hacker Rank* to the ASCII string *729799107101114328297110107*:

Character	H	a	c	k	e	r		R	a	n	k
ASCII Value	72	97	99	107	101	114	32	82	97	110	107

We then reverse the ASCII string to get the encoded string *701011792823411101701997927*.

To decode the string, first reverse the string of digits, then successively pick valid values from the string and convert them to their ASCII equivalents. Some of the values will have two digits, and others three. Use the ranges of valid values when decoding the string of digits.

For reference, the characters in *s* correspond to the following ASCII values:

- The value range for *A* through *Z* is *65* through *90*.
- The value range for *a* through *z* is *97* through *122*.
- The value of the space character is *32*.

Function Description

Complete the function *decode* in the editor below. The function must return the original decoded string.

decode has the following parameter(s):

encoded: an encoded string

Constraints

- $1 \leq |s| \leq 10^5$
- $s[i] \in \{ ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz\}$