Evesdropping

Eve is at it again and may have discovered a new way to intercept and read encrypted WiFi network traffic at her local coffee shop.

She has determined the following mapping by performing a few tests:

```
PLAINTEXT   ABCDEFGHIJKLMNOPQRSTUVWXYZ
CIPHERTEXT  FGHIJKLMNOPQRSTUVWXYZABCDE
```

The following are examples of ciphertext she has painstakingly decoded so far:

```
PLAINTEXT   HELLO WORLD
CIPHERTEXT  MJQQT BTWQI

PLAINTEXT   CODE WARS RULES
CIPHERTEXT  HTIJ BFWX WZQJX

PLAINTEXT   SUPERCALIFRAGILISTICEXPIALIDOCIOUS
CIPHERTEXT  XZUJWHFQNKWFLNQNXYNHJCUNFQNITHNTZX
```

In order to read data in realtime, Eve needs an algorithm. Can you provide an algorithm to decode any ciphertext into its plaintext equivalent?

Input

Data is provided in two lines. The first line contains the length of the ciphertext. The second line contains the full snippet of ciphertext to be decrypted.

```
11
MJQQT BTWQI
```

Output

Print the decoded plaintext.

```
HELLO WORLD
```

Discussion

- Whitespace is whitespace (in ciphertext or plaintext, it maps to the same value.)
- Ciphertext will only be the upper-case alphabet characters listed in the table above.
- All text will be written using upper-case (both cipher and plaintext).