

# H P C O D E W A R S X V I I

You dash to the closest event where the title appears to be in code:

DO TEE!ISCDH

The event coordinators explain how the title was created:

DECODE THIS! ... becomes ... DO TEE!ISCDH

problem **10**  
**Decode  
This!**  
6 points

There are 12 characters in both the original and encoded strings. The original first character is placed in the first encoded position. Each successive character is placed in an empty position based on the value of the last character:

Dxxxxxxxxxx. D=4, so the next character, E, is placed in the 4<sup>th</sup> empty position after D:

DxxxExxxxxxx. E=5, so the next character, C, is placed in the 5<sup>th</sup> empty position after E:

DxxxExxxxCxx. C=3, so the next character, O, is placed in the 3<sup>rd</sup> empty position after C, wrapping:

DOxxExxxxCxx. O=15, so place D in the 15<sup>th</sup> empty position after O, wrapping again.

DOxxExxxxCDx. D=4.

DOxxEExxxCDx. E=5.

DO xEExxxCDx. The space = 1.

DO TEExxxCDx. T=20.

DO TEExxxCDH. H=8.

DO TEEIxCDH. I=9.

DO TEExISCDH. S=19 (but there's only one spot left for the "!" anyway.)

DO TEE!ISCDH

Values:

A-Z = 1-26.

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Any other characters (punctuation, numbers, spaces) have a value of 1.

## Input

Each line will hold a number N, then one space, then N characters to decode. N will be at most 80. The last line will have a single 0.

```
12 Do Tee!iscdh
25 Yotei! mcgaeos'rued a drn
0
```

## Output

Each line's decoded string on its own line.

```
Decode This!
You're a decoding master!
```

# H P C O D E W A R S X V I I