Atbash X82824_en

Atbash is the name of an ancient Hebrew cypher (it appears already in Biblical texts) in which the first letter of the alphabet is replaced by the last, the second letter by the second-to-last, and so forth, until the last letter is replaced by the first. For the Latin alphabet that means that 'A' is replaced by 'Z', 'B' by 'Y', 'C' by 'X', ..., 'X' by 'C', 'Y' by 'B' and 'Z' by 'A'. Write a program that enciphers a text using the Atbash cipher. In the process, non-letters (spaces, digits, symbols, ...) are discarded and lowercase letters are transformed to uppercase before encoding.
Your program must define and use the function

```
// c is an upper- or lowercase letter

char atbash(char c);

// returns the uppercase Atbash encipherment of c
// e.g. atbash('A')='Z', atbash('y')='B', ...
```

and the procedure

```
// the standard input channel (cin) contains a sequence
// of characters ending in '#'

void print_atbash_encipherment();

// prints the Atbash encipherment of the text,
// including the end-of-text character '#' and an end of line.
```

Note: A program accepted by the judge that solves the problem without defining and using the aforementioned function would be considered invalid and would have a final score 0 in a real exam.
Note: Recall that at this point of the course using vectors or any other method to store massive data is not allowed.
Exam score: 2.5 **Automatic part:** 100%

Input

The input consist of a text (text = sequence of characters) ending with the reserved character '#'. See the examples.

Output

Print the encoding of the text using the Atbash cipher. End the output with the reserved character '#'. Non-letters in the original input text are discarded, and lowercase letters are replaced by their corresponding uppercase letters in the encipherment.

Sample input 1	Sample output 1
`The quick brown fox jumps over the lazy dog#`	`GSVJFRXPYILDMULCQFNKHLEVIGSVOZABWLT#`

Sample input 2

```
GSVJFRXPYILDMULCQFNKHLEVIGSVOZABWLT#
```

Sample output 2

```
THEQUICKBROWNFOXJUMPSOVERTHELAZYDOG#
```

Sample input 3

```
#
```

Sample output 3

```
#
```

Sample input 4

```
0000 #
```

Sample output 4

```
#
```

Sample input 5

```
abcdefghijklmnopqrstuvwxyz0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ#
```

Sample output 5

```
ZYXWVUTSRQPONMLKJIHGFEDCBA9876543210zyxwvutsrqponmlkjihgfedcba#
```

Problem information

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