

Hangman

Problem ID: p08hangman

Write a program that allows the user to play the game Hangman. The user inputs a file name containing 20 English words and an integer which is used to select the corresponding word from the file as the secret word. Thereafter, the user tries to guess the secret word by iteratively suggesting its individual letters. The program accepts letter inputs until all the letters of the secret word have been guessed or the user has guessed 12 times.

A typical input file (`data1.txt`) looks like this:

```
lion
umbrella
window
computer
glass
juice
chair
desktop
laptop
dog
cat
lemon
cabel
mirror
hat
golf
chess
car
conference
test
```

Input

The first line of the input contains the name of a file containing 20 English lowercase nouns, each of length ≤ 15 . The second line of the input contains an integer i , $1 \leq i \leq 20$, signifying that the program should select word no. i as the secret word. Each line no. $n > 2$ contains a single letter, which is the user's guess in iteration $n - 2$.

Output

When the input file cannot be opened, no output is generated. Otherwise, in each iteration, the output is:

- "Secret word: - - - ..." (one hyphen or correct letter for each letter in the secret word)
- "Guess {i}/12" (where $1 \leq i \leq 12$)
- "Correct letter {c}!" or "Incorrect letter {c}!" (where c is the most recently guessed symbol)

Finally, the last line of the output is either:

- "You won!" or
- "You lost! The secret word was - - - ..." (if the user guessed 12 times without guessing the secret word)

Sample Input 1

```
data1.txt
11
d
c
t
e
e
a
```

Sample Output 1

```
Secret word: - - -
Guess 1/12
Incorrect letter d!
Secret word: - - -
Guess 2/12
Correct letter c!
Secret word: c - -
Guess 3/12
Correct letter t!
Secret word: c - t
Guess 4/12
Incorrect letter e!
Secret word: c - t
Guess 5/12
Incorrect letter e!
Secret word: c - t
Guess 6/12
Correct letter a!
Secret word: c a t
You won!
```

Sample Input 2

```
data1.txt
19
c
a
b
h
f
i
g
y
n
q
c
e
```

Sample Output 2

```
Secret word: - - - - -
Guess 1/12
Correct letter c!
Secret word: c - - - - - c -
Guess 2/12
Incorrect letter a!
Secret word: c - - - - - c -
Guess 3/12
Incorrect letter b!
Secret word: c - - - - - c -
Guess 4/12
Incorrect letter h!
Secret word: c - - - - - c -
Guess 5/12
Correct letter f!
Secret word: c - - f - - - c -
Guess 6/12
Incorrect letter i!
Secret word: c - - f - - - c -
Guess 7/12
Incorrect letter g!
Secret word: c - - f - - - c -
Guess 8/12
Incorrect letter y!
Secret word: c - - f - - - c -
Guess 9/12
Correct letter n!
Secret word: c - n f - - - n c -
Guess 10/12
Incorrect letter q!
Secret word: c - n f - - - n c -
Guess 11/12
Correct letter c!
Secret word: c - n f - - - n c -
Guess 12/12
Correct letter e!
Secret word: c - n f e - e n c e
You lost! The secret word was conference
```