

ECE220 Programming Competition:

You have 1 hour to finish the competition.

Your task is to hack a password. You are given a helper function

```
void getHint(char* hinta, char* hintb);
```

The function returns two chars that appears in the password randomly, and hinta is guaranteed to appear before hintb. You need to implement the hack function:

```
void hack(char* ans, int size);
```

the *size* represents the size of the password. You may assume the size of password is between 3 to 10 characters. The password contains only letters from 'a' to 'z' (no caps). **There is no duplicate letters in the password.**

You may call *getHint* as many times as you want. Please note that you might get duplicate hints. Once you figure out the password, you should store the password in *ans* and return.

Example:

Password to guess: *computer*

Possible hint sequence from *getHint*:

hinta	hintb
p	r
c	u
c	o
p	r
o	m
...	...

Testing & Evaluation:

To test your program, please use the following command to compile:

```
gcc -g -Wall main.o hint.o hack.c -o pc
```

To run your program:

```
./pc [size of password] [number of passwords to guess]
```

We suggest you start with 3 letter passwords:

```
./pc 3 1
```

For the competition purpose, we will rank your submissions by their execution speed. Thus we will turn on compiler optimization for your final submission. The command we will be using are:

```
gcc -O3 main.o hint.o hack.c -o pc
```

`./pc 7 100`

(We might use `./pc 8 100` if there is a close call between submissions)

**Your rank is determined by the speed of your program not your speed to program.**

**Good Luck, Have Fun.**