

**2004/2005 SOUTHERN CALIFORNIA REGIONAL
ACM INTERNATIONAL COLLEGIATE PROGRAMMING CONTEST**

**Problem 0
Mirrored Pairs**

The letters 'b' and 'd' are mirror images of each other, as are 'p' and 'q'. No other pairs of letters are mirrors, except for letters like 'H' that are mirrors of themselves, and what's the interest in a pair that's just two of the same letter? We refuse to count self-mirrors as mirrored pairs.

Input is a list of lines with two characters on each line. Your program should end immediately when it encounters a line with two spaces.

The first line of output should contain only 'Ready'. For each pair of characters (prior to a pair of spaces), print the line 'Mirrored pair' if the characters are mirrors, otherwise print the line 'Ordinary pair'.

Sample Input

Fr
qp
HH
db

(this line contains two spaces)

pq

Output for the Sample Input

Ready
Ordinary pair
Mirrored pair
Ordinary pair
Mirrored pair

In addition to simply processing standard input and producing results to standard output, your program may converse with a server. The server will be set up so that your program can just read its input from standard input and write its output to standard output. The I/O with the server will be handled appropriately. Your program should start by writing a line with just the string 'Ready' on it to begin the conversation. It should then continue reading a line of input and writing a line of output until it reads a line with two spaces on it. It should then exit. If there are additional lines after the line with two spaces, they should not be read.

Test your program with the server using:

test0 *sourceFile controlFile traceFile*

where *sourceFile* is the name of your program's source, *controlFile* contains configuration data for the server (in this case, it is just sample input to be fed to your program), and *traceFile* is the name of the file to receive the transcript of your conversion. Read the output of *traceFile* to see how well your program works with the server.

Input from the server will be the same as if you redirected from standard input: each input line will contain two characters (besides the terminating newline). If the pair is a mirrored pair, output the line 'Mirrored pair', and if they're not a mirrored pair, output the line 'Ordinary pair'.

Because your program will be interacting with a server, make sure that your output is not stuck in a buffer while the server is timing you out. Standard error will receive the equivalent of a judge's evaluation. See the section in the Contest Environment Handout on *Programming for Interaction with a Server*.

Programs requiring an interactive server will be identified as such.