
4. EXCELlent

Program Name: Excellent.java

Input File: excellent.dat

Ms. Jones spends a lot of time with spreadsheets. One of her tasks is to compare two Excel spreadsheets to find the names in spreadsheet 1 that are missing from spreadsheet 2 and the names in spreadsheet 2 that are missing from spreadsheet 1.

You are to write a program that examines the spreadsheets and prints lists of the missing names.

Input

The first line of input will contain two integers, p and q , where p indicates the number of names in spreadsheet 1 and q indicates the number of names in spreadsheet 2. The next p lines will contain the names in spreadsheet 1 followed by q lines containing the names in spreadsheet 2. The names will be all uppercase in the form: LAST NAME, FIRST NAME.

Output

You will print the heading NAMES IN SPREADSHEET 1 THAT ARE NOT IN SPREADSHEET 2 followed by the list of names in spreadsheet 1 that are not in spreadsheet 2 in alphabetical order, one per line. After this list, you will print the heading NAMES IN SPREADSHEET 2 THAT ARE NOT IN SPREADSHEET 1 followed by the list of names in spreadsheet 2 that are not in spreadsheet 1 in alphabetical order, one per line.

Example Input File

```
10 9
SMITH, MARY
JONES, KERRY
ROBERTS, AMBER
JONES, JERRY
LASITER, RICK
ROGERS, GENE
ANDERSON, TROY
HARWOOD, SHIRLEY
GARCIA, RICARDO
GREEN, WES
SMITH, MARY
DOLE, ANN
JONES, KERRY
ROBERTS, AMBER
SMALLWOOD, LESTER
JONES, JERRY
ROGERS, GENE
RODRIGUEZ, JORGE
GARCIA, RICARDO
```

Example Output to Screen

```
NAMES IN SPREADSHEET 1 THAT ARE NOT IN SPREADSHEET 2
ANDERSON, TROY
GREEN, WES
HARWOOD, SHIRLEY
LASITER, RICK
NAMES IN SPREADSHEET 2 THAT ARE NOT IN SPREADSHEET 1
DOLE, ANN
RODRIGUEZ, JORGE
SMALLWOOD, LESTER
```