

Problem 3: Wingo!

The Church of Our Lady of Immaculate Concession is introducing a new game called Wingo to its Sunday Night Bingo lineup. In Wingo, each player buys a card with five unsorted non-zero positive integers. The Wingo caller then announces numbers one at a time until at least one player has all the numbers on their card called, who is the winner. If several players have their cards filled at that point, they are all winners.

Write a program which, given a sequence of $n \geq 5$ positive non-zero numbers and m Wingo cards, computes and prints both the numbers of all winning cards and the index of the number in the Wingo calling sequence at which this win occurred. If there are no winning cards relative to the provided Wingo calling sequence, an appropriate message is printed.

Your input will be textfile, in which the first line contains the number of Wingo games to analyze followed by the data comprising each Wingo game. Each game is composed of $m + 2$ lines in which the first line contains the values of n and m , the second line consist of the n numbers in the Wingo calling sequence, and each of the subsequent m lines specifies a Wingo card as five integers. You may assume that the input file is formatted correctly.

Sample input #1 (available as file “test3.dat”):

```
3
10 5
11 2 4 32 5 1 22 9 47 17
2 11 7 5 32
2 32 5 1 22
11 32 5 4 47
32 22 5 2 1
1 2 3 4 5
10 5
11 2 4 32 5 1 22 9 47 17
2 11 7 5 32
2 32 11 4 5
11 32 5 4 47
32 17 5 2 1
1 2 3 4 5
10 7
11 2 4 32 5 1 22 9 47 17
2 11 7 5 32
2 3 11 4 5
11 42 5 4 47
32 17 49 2 1
```

```
1 2 3 4 5
5 6 7 8 9
11 10 9 8 7
```

Sample output:

```
Wingo on number 7!!!
    Winning card(s): 2 4
Wingo on number 5!!!
    Winning card(s): 2
No Wingo winners
```