Treasure Recursion

A great treasure is hidden in the catacombs of a castle! You just use your C# searching skills to search the tunnels and locate the treasure in the least possible time, before the castle crumbles and buries the treasure forever. You will rappel into the catacombs from above, and once inside, travel horizontally through tunnels and around walls until you locate the treasure. A friend inside the castle has arranged to give you a text file (**treasure.txt**) containing a map, which will be used by your computer program to do the searching. Your program must go through the open tunnels to get to the treasure.

Input

The first line of input indicates T, the number of test cases, where T >= 1 and T < 10. Then, each test case begins with two integers R and C separated by a space on a line by themselves, specifying the number of rows in a rectangular map, followed by the number of columns. Both R and C are >= 1 and <= 50. The remaining lines consist of the map itself: the letter S marks the starting point, X is a wall, a space is an open tunnel, and the letter T shows the location of the treasure. Every edge of a map is bounded by a wall. Some tunnels lead to dead ends, and usually only one tunnel leads to the treasure.

Output

If the treasure is found, print out a message indicating the row and column coordinates of the treasure., in the format: **Treasure found at row *R* column *C*,** where *R* and *C* are the row and column of the treasure cell. Row and column numbers start at 1. If the treasure is not found, display: **Treasure not found**

Sample Input (treasure.txt)

```
2
5 7
XXXXXXX
XTX  XX
XXX X X
X  S  X
XXXXXXX
8 11
XXXXXXXXXXX
XX   XXXXXX
XX XXX TXXX
XX XXX XXXX
XX XXX XXXX
XXS    XXXX
XXXX XXXXXX
XXXXXXXXXXX
```

Sample Output

```
Treasure not found
Treasure found at row 3 column 8
```