**Problem 4**

# Count Squares

For this particular problem, you will need to count the number of squares found in a grid. The grid will contain '.' and '*' characters. Squares are defined to be a solid shape formed with '*' characters, that have equal length and width.

*Examples of squares:*

Square with length and width of 1:  `*`

Square with length and width of 2:  `* *`
`* *`

Square with length and width of 3:  `* * *`
`* * *`
`* * *`

Square with length and width of 4:  `* * * *`
`* * * *`
`* * * *`
`* * * *`

The input file (**DATA41.txt** for the first submission and **DATA42.txt** for the second submission) will contain five sets of data. The first line of each set contains two integers, *r* and *c*. *r* represents the number of rows in the grid and *c* represents the number of columns in the grid. *0 < r, c < 25*. The next *r* lines of the set will contain *c* characters, either a '.' or a '*'.

The output file (**OUT41.txt** for the first submission and **OUT42.txt** for the second submission) will contain the number of squares found in the grid.

| Sample Input (three sets of data only) | Sample Output (three sets of data only) |
|---|---|
| `4 4`<br>`.*.*`<br>`**..`<br>`***.`<br>`****`<br>`5 6`<br>`*****.`<br>`.*****`<br>`*****.`<br>`.*****`<br>`*****.`<br>`7 4`<br>`****`<br>`****`<br>`****`<br>`****`<br>`....`<br>`****`<br>`****` | `14`<br>`45`<br>`41` |