1. Pattern Finder

PROBLEM: Given an 8 x 8 array and an rxc subarray, determine how many times the subarray appears in the 8 x 8 array. The subarray may not be rotated or flipped.

0	0	0	0	1	1	0	0
1	1	0	0	0	1	1	1
1	0	0	0	0	1	0	1
1	1	0	1	0	1	1	0
0	1	0	0	0	1	1	0
1	1	0	1	0	1	1	1
1	1	1	0	0	1	1	0
1	0	0	0	0	1	1	1

INPUT: There will be 11 lines of input. The first line, the 8 x 8 array, contains 8 hex strings of 2 characters each. When each hex character is converted to binary (4 bits each), it will fill the rows of the array from top to bottom and from left to right. The sample data below corresponds to the array above.   The next 10 lines contain subarrays to find. Each line is 2 integers, r and c, followed by r strings of c binary digits. For example the line 2 3 010 000 represents the subarray below:

0	1	0
0	0	0

OUTPUT: For each subarray, print the number of times that subarray appears in the initial 8 x 8 array. An array element can be used more than once. If a 1x2 subarray contained

0	0

then that subarray appears 4 times in the top row of the initial array.

SAMPLE INPUT
```
0C C7 85 D6 46 D7 E6 87
2 2 00 01
2 3 010 000
4 1 0 0 1 1
1 2 11
3 2 10 11 01
4 4 0000 1100 1000 1101
2 2 11 11
2 4 0110 0111
1 4 0000
3 2 11 10 11
```

SAMPLE OUTPUT
```
1.  2
2.  1
3.  0
4.  15
5.  1
6.  1
7.  5
8.  2
9.  3
10. 3
```

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FILES ON THE FLASH DRIVES ARE NAMED: as1-sample.txt and as1-test.txt

TEST INPUT

```
FD 53 4E 61 A8 72 BC 09
2 2 10 01
4 2 11 10 01 00
1 3 001
1 1 1
3 3 110 001 111
2 1 1 1
2 4 1111 0111
1 2 00
1 3 010
1 4 1010
```

TEST OUTPUT

```
1.   4
2.   2
3.   6
4.   32
5.   1
6.   11
7.   0
8.   13
9.   7
10.  3
```

FILES ON THE FLASH DRIVES ARE NAMED: as1-sample.txt and as1-test.txt