Count Friends

Attempted by: **579** / Accuracy: **64%** / Maximum Score: **20** / ★★★☆☆ 5 Votes

Tag(s): Disjoint Set, Easy, approved

There are N students and M relationships of the form u v, which means that student u and student v are friends. If two students are not friends directly but they have a mutual friend, then they too become friends. Your task is to count the number of friends of the i^{th} student where $1 \leq i \leq N$.

Input:
The first line consists of two integers N and M denoting the number of students and the number of relationships respectively.
The next M lines consists of two integers u and v denoting that student u and student v are friends.
u and v can never be equal and relationships are not repeated.

Output:
Print N space separated integers which tells us the number of friends of the i^{th} student.

Constraints:
$1 \leq N \leq 10^5$
$1 \leq M \leq 10^5$
$1 \leq u, v \leq N$

SAMPLE INPUT

```
4 3
4 3
2 4
2 3
```

SAMPLE OUTPUT

```
0 2 2 2
```

Explanation

For the sample test case -
Student 1 has no friends.
Student 2 is friends with student 3 and 4.
Student 3 is friends with student 2 and 4.
Student 4 is friends with student 2 and 3.

Time Limit: 1.0 sec(s) for each input file.

Memory Limit:	256 MB
Source Limit:	1024 KB
Marking Scheme:	Marks are awarded when all the testcases pass.
Allowed Languages:	C, C++, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Scala 2.11.8, Swift, Visual Basic

CODE EDITOR

Enter your code or Upload your code as file. Save C (gcc 4.8.2)

```c
#include <stdio.h>

int main()
{
    printf("Hello World!\n");
    return 0;
}

```

1:1

Provide custom input

COMPILE & TEST SUBMIT

Press Ctrl-space for autocomplete suggestions. POWERED BY code table

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