He Got the Box!

Filename: box

Ben has been traveling intergalactically for many years in the search of a perfect box for his portrait. His portrait is priceless, so only the best box will do. Luckily for Ben, he only has to travel in two dimensions, and two-way teleportation devices located throughout the 2D galaxy allow him to jump from one place to another instantaneously. Good thing too, because big walls may block Ben's path, and without the teleportation devices, he would be stuck without his box!

The Problem:

Ben has a map of the *m* x *n* grid in which he can travel. The map contains the locations of any teleportation devices, their destinations, the location of his precious box, and the locations of any walls within his traveling area. The problem that Ben faces is that he does not know how to get from his initial position to the box in the shortest number of steps. Your job is to move him throughout this 2D galaxy in the quickest way possible. If Ben decides that he can reach the box faster without using the teleportation devices he encounters, he does so. Also, a valid path from Ben's initial position to the box will always be present. Finally, whenever Ben reaches his beloved box, Lord Skippy screams from the clouds, "He got the Box!"

The Input:

The input will consist of several maps. The first line of a map will consist of two integer values, *m* and *n* ($0 < m \leq 20$, $0 < n \leq 20$), which indicate the number of rows and columns in Ben's map, respectively. The next *m* lines will contain exactly *n* characters, and each one of these characters has a special meaning described in the table below:

Character	Description
B	Initial position of Ben
.	Open areas Ben can travel through
W	Wall, Ben cannot move through walls
X	Box location
#	Teleportation number (described below)

The teleportation numbers are not actually represented by the # character, but as the numbers 0 through 9. If teleportation numbers are present within a map, they will always show up exactly twice. To get a better understanding of this, see the example below:

```
5 5
B....
....1
WWWWW
1....
....X
```

Ben can reach the box in 10 steps by first moving to the right 4 spaces and then down one space. He is now on teleportation device #1, and because using this device will get him to the other side of the wall, he decides to use it. After using the device, he instantaneously travels to the corresponding 1 on the other side of the wall. From there, he can move 4 more spaces to the right and down one space, making a total of 10 steps.

Exactly one `B` and `X` are guaranteed to be in each map, therefore each map will contain at least two characters. Input will terminate when *m* or *n* is zero.

The Output:

For each input case, output one line of text:

`He got the Box in` *x* `steps!`

where *x* is the minimum number of steps required for Ben to obtain the box.

Sample Input:

```
5 5
B....
....1
WWWWW
1....
....X
5 4
...B
WWW.
5XW.
WWW.
.5..
0 0
```

Sample Output:

```
He got the Box in 10 steps!
He got the Box in 7 steps!
```