Sparse Matrix

A sparse matrix is a large matrix with almost all elements of the same value (typically zero). The normal representation of a sparse matrix takes up lots of memory when the useful information can be captured with much less. A possible way to represent a sparse matrix is with a cell vector whose first element is a 2-element vector representing the size of the sparse matrix. The second element is a scalar specifying the default value of the sparse matrix. Each successive element of the cell vector is a 3-element vector representing one element of the sparse matrix that has a value other than the default. The three elements are the row index, the column index and the actual value. Write a function called **sparse2matrix** that takes a single input of a cell vector as defined above and returns the output argument called **matrix**, the matrix in its traditional form. Consider the following run:

```
cellvec = {[2 3], 0, [1 2 3], [2 2 -3]};
matrix = sparse2matrix(cellvec)

matrix =

     0     3     0
     0    -3     0
```

Your Function

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```
1
```

Code to call your function

Reset

```
1 matrix = sparse2matrix({[2 3], 0, [1 2 3], [2 2 -3]})
```

▶ Run Function

Assessment:

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A few simple cases

Random cases