

# Exercise 1 - Answers

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- **Use the function `size()` to retrieve information about the matrix A. What information about the network does `size()` return?**

The `size()` function returns the dimensions (columns and rows) of the matrix passed in as an argument. In our case we get a vector `[10 10]` which means our matrix has 10 rows and columns.

- **Is the resulting sparse adjacency matrix identical to the adjacency matrix computed previously?**

The resulting matrix is different, it has 14 rows and 2 columns, because it treats the digits from the file as the values of the matrix.

- **Apply the function `nnz()` to the sparse adjacency matrix A. What is the meaning of its return value in terms of the network?**

Function `nnz()` returns the number of non zero values, which means that this result divided by 2 gives us the number of edges in our graph.