

# Excel File I/O

The attached [Distances.xlsx](https://lcms-files.mathworks.com/content/file/348f7627-8238-4f0d-99de-1c15fd5a171c/Distances.xlsx?versionId=rPFc1UxVH04p8nuG6kIM8IEiuYYmE4uC) (<https://lcms-files.mathworks.com/content/file/348f7627-8238-4f0d-99de-1c15fd5a171c/Distances.xlsx?versionId=rPFc1UxVH04p8nuG6kIM8IEiuYYmE4uC>) file contains a spreadsheet with the pairwise distances in miles of the top 100 US cities by population. A preview of the spreadsheet is shown below. The first row and first column contain the city names using the following format: city name comma space capitalized state abbreviation, e.g., Nashville, TN. Note that the very first cell of the spresheet, A1, is blank.

Write a function called **get\_distance** that accepts two character vector inputs representing the names of two cities. The function returns the distance between them as an output argument called **distance**. For example, the call **get\_distance('Seattle, WA','Miami, FL')** should return 3723. If one or both of the specified cities are not in the file, the function returns -1.

Preview of the first five cities of *Distances.xlsx*

	A	B	C	D	E	F
1		Abilene, TX	Akron, OH	Albuquerque, NM	Alexandria, VA	Allentown, PA
2	Abilene, TX	0	1481	724	1615	1730
3	Akron, OH	1481	0	2185	382	552
4	Albuquerque, NM	724	2185	0	2331	2447
5	Alexandria, VA	1615	382	2331	0	195
6	Allentown, PA	1730	552	2447	195	0

## Your Function

 Save

 Reset

 MATLAB Documentation (<https://www.mathworks.com/help/>)

1

## Code to call your function

 Reset

1 distance = get\_distance('Seattle, WA','Miami, FL')

 Run Function



## Assessment:

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Nashville, TN and Las Vegas, NV

Random city pairs

Non-existent city