A Task to read text files with text and numerical data

The problem:

We have a data file that looks like this:

```
col1, col2, col3

"something", "something else", "more"

"somethingxx", "something elsexx", "morexx"

1,4,56

1,2,5

---------------------------------------------
```

We want to read it so that the numerical data can be analysed and the text data also remains intact.

The following code splits the file into two parts: a text and a numerical part. The text part is returned as a cell, and the numerical part as a table, with the column names as in the file header.

```matlab
file_input = "";
data_init = readcell(file_input);
```

```
Error using readcell
Unable to find or open ''. Check the path and filename or file permissions.
```

```matlab
counter = 0;
for i = 1:height(data_init)
    if ~isnumeric(data_init{i,1})
        counter = counter + 1;
    end
end
num_text_lines = counter;

data = readcell(file_input,"NumHeaderLines",num_text_lines);
header = readcell(file_input);
header= header(1,:);

data_table = cell2table(data,"VariableNames",header);
string_cell = readcell(file_input);
text_data=string_cell(1:num_text_lines,:);


clear counter string_cell file_input num_text_lines data header data_init i
% dont care about these variables
```

Numerical data is stored as **data_table** and the text is stored as **text_data**

```
data_table
```

```
data_table = 3×4 table
```

	col1	col2	col3	col4
1	1	4	56	99
2	1	2	5	0
3	3	2	1	2

```
text_data
```

```
text_data = 3×4 cell
'col1'        'col2'            'col3'       'col4'
'something'  'something else'  'more'       'nothing'
'somethingxx''something elsexx''morexx'     'nothing'
```

From the code above, we can make a Matlab Task, and call it "read_special_file". The task is stored in "**read_special_file.m**".

We can use the task by typing "read_special_file" and clicking on the suggestion. The task below can load in the files "test.csv" and "test2.csv".