atz_make_csv_table_ex1

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0.0.1 CSV Table Writer

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Writes a Comma-Separated Values (CSV) format file for a table of data. This allows for your data to be opened in spreadsheet software like Open-Office, Google-Sheets, or Excel.

[1]:
```
import numpy as np;
import os;

script_base_name = 'atz_make_csv_table_ex1'; # script name without extension

print("Packages:");
print("numpy.__version__ = " + str(np.__version__));
#print("vtk.__version__ = " + str(vtk.__version__));

print("Misc:");
print("script_base_name = " + script_base_name);
```

```
Packages:
numpy.__version__ = 1.18.5
Misc:
script_base_name = atz_make_csv_table_ex1
```

[2]:
```
base_dir  = './output/%s'%(script_base_name);
if not os.path.exists(base_dir):
  os.makedirs(base_dir);
print("base_dir = " + base_dir);
```

```
base_dir = ./output/atz_make_csv_table_ex1
```

[3]:
```
def make_table_csv1(values,row_labels,column_labels):
    num_rows = len(row_labels); num_cols = len(column_labels);
    # create the table
    s = "";

    # write row header
    for j in range(0,num_cols):
      if j > 0:
```

```
        s += r",";
      s += r"%s"%column_labels[j];
      if j == num_cols - 1:
        s+= "\n";

    for i in range(0,num_rows):
      s += r"%s"%row_labels[i];
      for j in range(0,num_cols-1):
        val = values[i,j];
        s += ",%.4e"%val;
        if j == num_cols - 2:
          s += "\n";

    s += "\n";

    return s;

# --- Make Table:
row_labels = [];
row_labels.append(r'First Run Name');
row_labels.append(r'Another Run Name');

column_labels = [];
column_labels.append(r'Method:');
column_labels.append(r'1000');
column_labels.append(r'2000');
column_labels.append(r'3000');
column_labels.append(r'Final');

num_rows = len(row_labels); num_cols = len(column_labels);
values = np.random.rand(num_rows,num_cols-1);

# --
s = make_table_csv1(values,row_labels,column_labels);
print(s)
print("Write file:");
filename = '%s/test_table_2.csv'%base_dir;
print("filename = " + filename);
fid = open(filename,'w');
fid.write(s);
fid.close();
```

```
Method:,1000,2000,3000,Final
First Run Name,8.6004e-01,5.5627e-01,2.3338e-01,4.7525e-01
Another Run Name,1.2117e-02,7.1934e-01,9.5434e-01,4.1291e-01
```

```
Write file:
filename = ./output/atz_make_csv_table_ex1/test_table_2.csv
```