

ADS1 exercises – Formatting

1. Produce formatted tables of the exponential function with values from 1 to 20 in steps of 0.5. The tables should have a layout like this

x		exp(x)
1.0		2.718
.....		

Produce a table with numbers in a floating point format with a precision of 3 and another table with scientific notation with a precision of 3. In both cases allow for sufficient space.

2. Read the file `access_electric.csv` which contains information on the percentage of population with access to electricity. Transpose and clean as usual.

Extract a dataframe which includes the BRICS countries (Brazil, Russian Federation, India, China, South Africa). Drop all rows with one or more NaN's.

- (a) The 2022 version of anaconda includes a pandas version in with the `df.to_string()` method ignores input to the keyword argument `formatter`. If you have installed the 2023 version the way shown in the lecture will work. Otherwise, please find a method to format all floats using the same format in the lecture addendum.

Produce output with the data formatted with a precision of 1. Write it into a textfile.

- (b) Create a lineplot using the dataframe plot method.
- (c) Produce two bar charts, one for 2000 and 2020.