MATLAB files documentation

This files details each MATLAB function and file in the folder in terms of input, output and purpose.

Functions

The main functions in the folder are:

- **rLmin**: determines if a reduced design matrix is rL-minimal.
  - *Input*: set of columns of the design tested.
  - *Output*: True if the design is rL-minimal.
- **STselect**: selects candidate designs using the search-table method.
  - *Input*: set of columns of the parent design, order used in the search-table.
  - *Output*: List of columns' set of all the candidate designs.
- **DOPselect**: selects candidate designs using the delete-one-factor projection method.
  - *Input*: set of columns of the parent design.
  - *Output*: List of columns' set of all the candidate designs.

The rest of the functions are utility functions and are detailed in the MATLAB code.

Files

There is a single MATLAB file in the folder: **Catalog_Test.m**. It produces a catalog for N-run two-level regular designs up to n-factors. There are 3 variables to change at the begining of the file:

- **N**: the number of runs.
- **n**: the maximal number of factors.
- **verbose**: (boolean) to have info on the computation, and a summary table at the end.