This file describes the analysis plan for the experiments of the conference paper "Learning from Difference: An Automated Approach for Learning Family Models from Software Product Lines" published in the 23rd International Systems and Software Product Line Conference - Volume A 2019.

Steps:

(1) In data/scripts/ folder, execute the **run___pair.py** files to learn an FFSM model from each pair of FSM model of each SPL spl.

(2) In data/scripts/ folder, execute the **run__.py** files to recover an FFSM model from each SPL spl by using exhaustive learning.

(3) The data/script.r file performs the statistical analysis we made using the dataset.tab and recovering_ffsm.tab files. These tab files were handcrafted using the log files from each run in the two previous steps.

(4) The data/script.r script also generates multiple plots depiciting:

```
- the correlation between feature sharing and model size in number of states
  See file -> correlation.pdf

- the size of the recovered FFSM models in number of states
  See file -> recovering_ffsm.pdf

- the size of the FFSM models learned from all pairs of FSMs
  See files -> tot_size_prod.pdf and tot_size_prod_2.pdf
```

(5) The data/script.r script also prints a few other statistics in the standard output

If you have any questions, feel free to contact me via damascenodiego@alumni.usp.br