

Advanced Process Mining

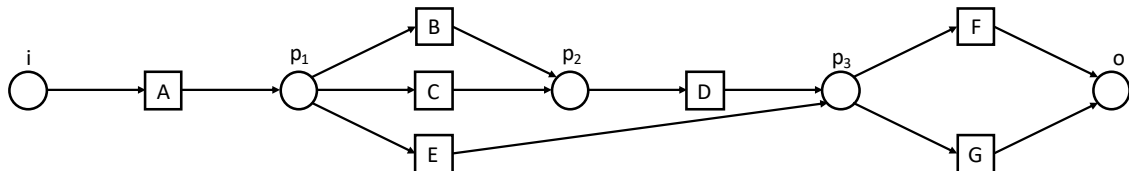
Summer term 2020

Exercise sheet 6

Revision

Exercise 1: Four dimensions of quality

a) Given the following process model,



generate an event log with the least possible number of entries that will result in:

- i) Precision = 1
 - ii) Fitness = 1
- b) Calculate the F1-Score for the given values:

Fitness = 0.8

Precision = 0.95

c) Name two measurements to reduce the complexity of real-life logs.

Exercise 2: Directly-Follows Graph

- a) Name one possible problem with Directly-Follows graphs.
- b) True or False: The precision of a Directly-Follows graph is very high.

Exercise 3: Conformance Checking

- a) True or False: The effort to find the optimal alignment is independent from the trace length and model size.
- b) True or False: There are always multiple optimal alignments for a given trace and model if the trace is not exactly representable by the model.
- c) Name two reasons why conformance checking can be useful.