Conformance Checking

Footprint & Token-Based Replay

BPI-I 8

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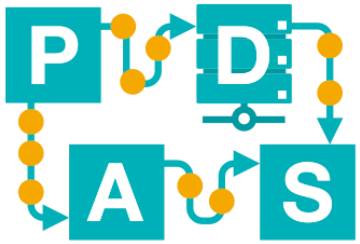
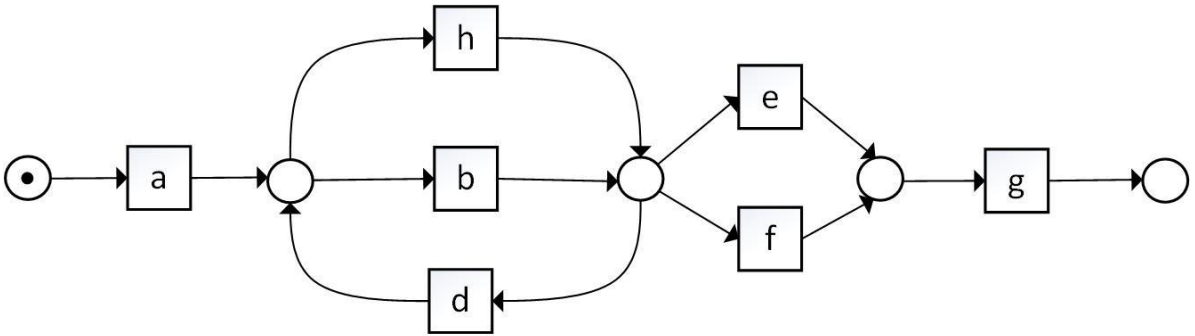


Chair of Process and Data Science

RWTH AACHEN UNIVERSITY

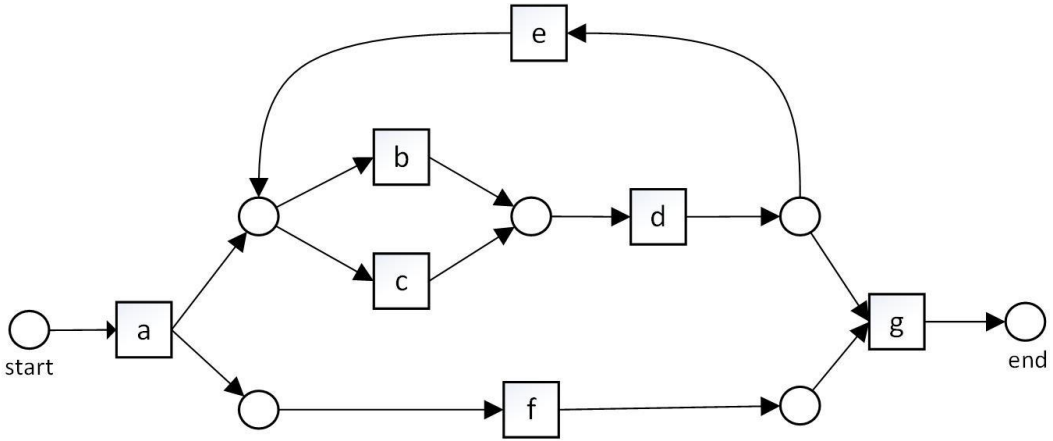
Exercise 1

- **Compute the footprint-based conformance for the event log L and the presented model.**
  - $L = [\langle a, b, f, e, g \rangle^{45}, \langle a, b, d, b, e, f, g \rangle^{5}, \langle a, h, e, f, g \rangle^{25}, \langle a, h, f, e, g \rangle^{25}]$



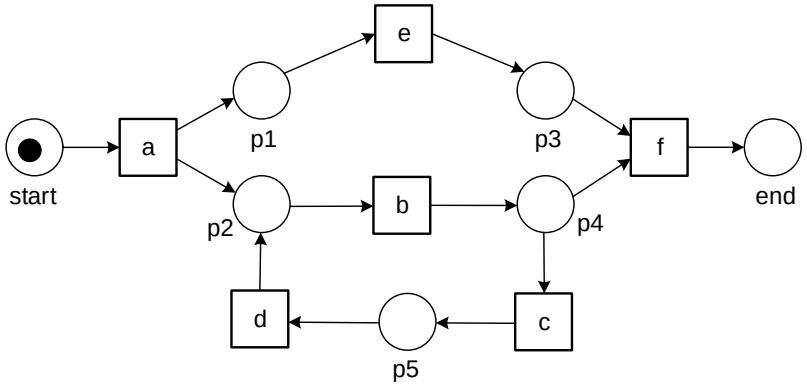
Exercise 2

- **Compute the token-based replay fitness for the event log L and the presented model.**
  - $L = [\langle a, b, d, f, g \rangle^{8}, \langle a, c, d, e, b, f, g \rangle^{4}, \langle a, b, c, d, f, g \rangle^{5}, \langle a, b, f, g \rangle^{1}, \langle b, d, f, g \rangle^{2}]$



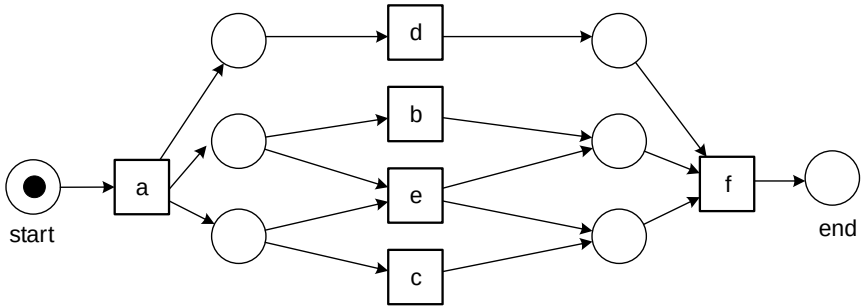
Exercise 3

- **Compute the footprint and token-based replay fitness for the event log L and the presented model.**
  - $L = [\langle a, b, e, f \rangle^2, \langle a, c, d, f \rangle^3]$



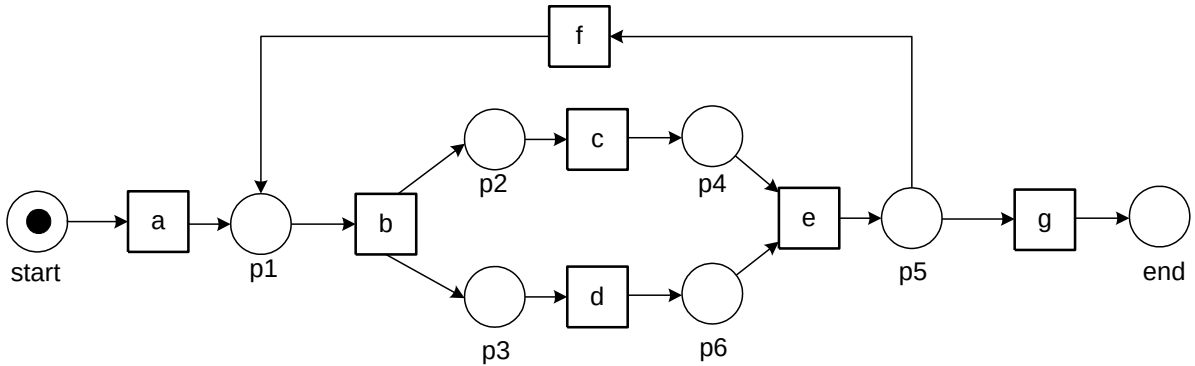
Exercise 4

- **Compute the footprint and token-based replay fitness for the event log L and the presented model.**
  - $L = [\langle a, c, d, f \rangle, \langle a, c, b, d, f \rangle^2, \langle a, b, c, f \rangle, \langle a, e, f \rangle^2]$



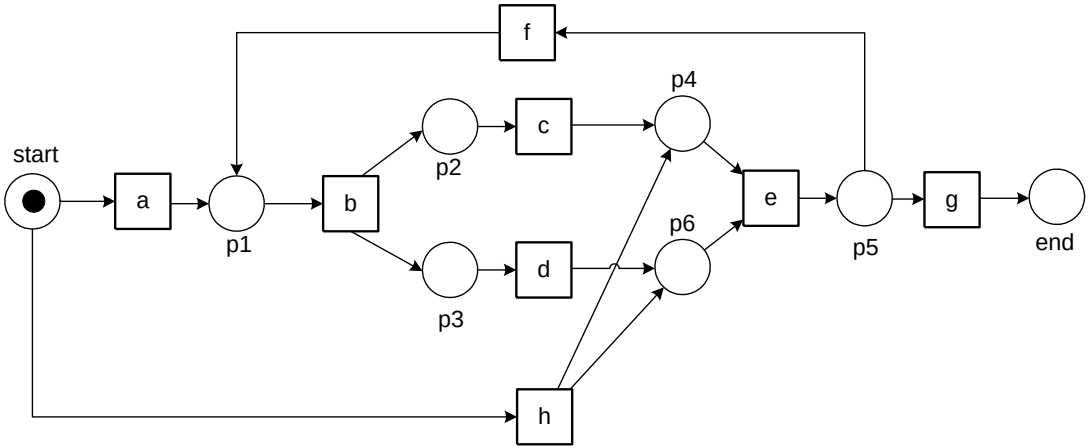
Exercise 5

- **Compute the footprint and token-based replay fitness for the event log L and the presented model.**
  - $L = [\langle a, b, c, d, e, f, b, d, c, g \rangle, \langle a, b, d, c, e, g \rangle, \langle a, b, c, d, e, f, c, d, e, f, b, d, e, g \rangle]$



Exercise 6

- **Compute the footprint and token-based replay fitness for the event log L and the presented model.**
  - $L = [\langle a, b, c, e, f, b, d, c, e, g \rangle, \langle a, b, e, g \rangle, \langle h, e, g \rangle]$



Exercise 7

- **Design a sound workflow net using all the activities $\{a, b, c, d\}$ and only those activities such that it can replay the following trace but the fitness score using footprint table is below 0.7.**
  - $\langle a, b, c, d \rangle$
  - **What will be the token replay fitness, higher or less than footprint? Why?**