

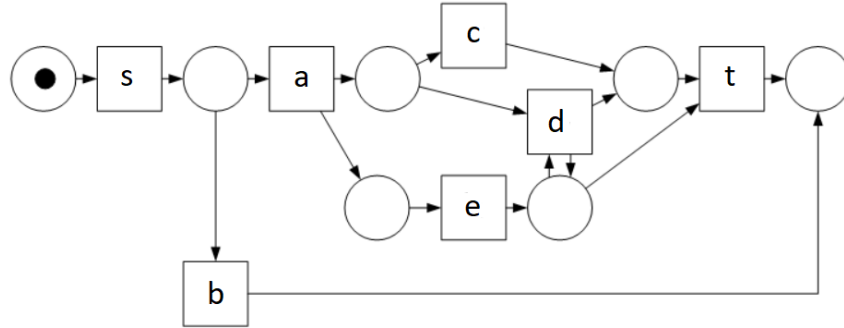
PODS EXAM: Practical Part

Name:	
Student ID:	

Exercise 0.1 The following event log was extracted from an enterprise information system $L = [\langle a, d, f, h \rangle, \langle a, c, e, g, c, e, h \rangle, \langle b, f, g, d, f, h \rangle]$

- Derive the \rightarrow_L relation.
- Use the eight steps of the α -algorithm to construct the corresponding Petri net and draw the Petri net (delivering all of the intermediate results is not necessary, only the resulting Petri net is required).
- If possible, give a trace possible according to the discovered model but not (yet) observed in the log.

Exercise 0.2 Consider event log $L = [\langle s, a, c, e, t \rangle^5, \langle a, e, d, t \rangle^3, \langle s, a, e, t \rangle^4, \langle s, b \rangle^{10}]$ and the following Petri net:



1. Compute fitness of the event log with respect to the model using token-based fitness.
2. Give an optimal alignment for the trace $\langle a, b, d, c, d, e, t \rangle$, and, its corresponding fitness. Use the standard cost function, i.e. log/model moves have cost 1, synchronous moves have value 0.