Alpha Miner

The alpha miner is one of the most known Process Discovery algorithm and is able to find:
•   A Petri net model where all the transitions are visible and unique and correspond to classified events (for example, to activities).
•   An initial marking that describes the status of the Petri net model when a execution starts.
•   A final marking that describes the status of the Petri net model when a execution ends.
We provide an example where a log is read, the Alpha algorithm is applied and the Petri net along with the initial and the final marking are found. The log we take as input is the running-example.xes.

Process Discovery algorithms want to find a suitable process model that describes the order of events/activities that are executed during a process execution.

First, the log has to be imported. As shown in figure 1

```python
import os
from pm4py.objects.log.importer.xes import importer as xes_importer
log = xes_importer.apply(os.path.join("tests","input_data","running-exam
```

Figure 1

Subsequently, the Alpha Miner is applied. As shown in figure 2

```python
from pm4py.algo.discovery.alpha import algorithm as alpha_miner
net, initial_marking, final_marking = alpha_miner.apply(log)
```