

Using the provided CSV file design a pipeline that converts the event data into a 30-minute interval data shape. With the following structure.

Extension	Interval	Productive Hours
ShyftOff	10/1/2024 10:00:00 AM	0.33
ShyftOff	10/1/2024 10:30:00 AM	0.5

The natural key for the output structure is Extension + Interval Start. Each interval is constrained to be on the 0 or 30 for all hours of the day. Productive hours is the sum of time between events “Done On” when the “Action” is either: “REMOVCEON” or “ONLINE”; or “OFFLINE” and “Detail” is “Backoffice”. All other events are not productive. Each row has a maximum productive hours value of 0.5.

1. Use SQL to create a query (view or function) that converts the input CSV shape into the output shape above.
2. Describe the design of an alerting feature, using SQL or Python, that could notify when there is no data for intervals within the past 24 hours.

CSV:

[https://drive.google.com/file/d/1--vYu7Hoz1ZNE3lcWj\\_0QAcJAia8aISn/view?usp=sharing](https://drive.google.com/file/d/1--vYu7Hoz1ZNE3lcWj_0QAcJAia8aISn/view?usp=sharing)