Cloud Development B

ICE TASK 2

ST10440287

What is the payment model for Azure Stream Analytics?

Azure Stream Analytics operates on a subscription basis. This means that you only pay for the duration of your job's operation and the quantity of Streaming Units it consumes. A specific quantity of memory and processing power is represented by each SU (Microsoft Ignite, 2025).

What is the difference between a stream and reference input?

Live, continuous data that constantly enters, such as messages from an Event Hub or an Internet of Things device, is called a stream input.  
Static or slowly changing data, such a lookup table or a file you use to supplement your streaming data with additional features, is called a reference input (Microsoft Ignite, 2025).

What is the difference between application time and arrival time?

The time the event really occurred and was noted in the data itself is known as the application time.  
The moment the event reaches Azure Stream Analytics is known as the arrival time. Stream Analytics uses the arrival time automatically if you don't specify an application time (Microsoft Ignite, 2025).

For which query construct do you need to select an identifier from an input and push it to an output?

To join, group, or match data in your query, you must choose and provide an identifier. This enables you to deliver the right data to your output and helps Azure Stream Analytics determine which events belong together (Microsoft Support, 2025).

Can you process different inputs in the same query?

Yes, you can process different inputs in the same query. For example, you can combine two data streams or join a data stream with a reference input in one query (Microsoft Support, 2025).

When is an event considered out of order?

When an event occurs later than expected based on its timing, it is considered out of order. This usually happens when its event time exceeds the permitted delay and is older than the system's current processing time (QuestDB, 2025).

Is it possible to get a substring from a property in a query?

Yes, you can get a substring from a property using the SUBSTRING () function.  
For example:

SELECT SUBSTRING(DeviceName, 1, 5) AS ShortName FROM Input

This takes the first 5 characters from the DeviceName field.

Reference list:

Microsoft Ignite - <https://learn.microsoft.com/en-us/azure/stream-analytics/stream-analytics-introduction>

Microsoft Support - <https://support.microsoft.com/en-us/office/examples-of-query-criteria-3197228c-8684-4552-ac03-aba746fb29d8>

QuestDB - <https://questdb.com/glossary/out-of-order-event/>