

Usual Execution output:

```
Sent event: {'song_id': 404, 'timestamp': 1742131387.3013604, 'region': 'US', 'action': 'play'}
Sent event: {'song_id': 202, 'timestamp': 1742131388.0496716, 'region': 'APAC', 'action': 'play'}
Sent event: {'song_id': 101, 'timestamp': 1742131390.0478222, 'region': 'US', 'action': 'play'}
Sent event: {'song_id': 101, 'timestamp': 1742131390.9162977, 'region': 'APAC', 'action': 'play'}
Sent event: {'song_id': 505, 'timestamp': 1742131391.7911646, 'region': 'US', 'action': 'play'}
Sent event: {'song_id': 404, 'timestamp': 1742131393.416715, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 101, 'timestamp': 1742131394.8853097, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 101, 'timestamp': 1742131396.139115, 'region': 'US', 'action': 'play'}
Sent event: {'song_id': 202, 'timestamp': 1742131397.842831, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 101, 'timestamp': 1742131399.0608277, 'region': 'APAC', 'action': 'play'}
Sent event: {'song_id': 303, 'timestamp': 1742131400.1084404, 'region': 'APAC', 'action': 'play'}
Sent event: {'song_id': 101, 'timestamp': 1742131400.89847, 'region': 'APAC', 'action': 'play'}
Sent event: {'song_id': 101, 'timestamp': 1742131401.9314969, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 202, 'timestamp': 1742131403.2241638, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 202, 'timestamp': 1742131404.0534666, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 202, 'timestamp': 1742131405.2157965, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 505, 'timestamp': 1742131406.5744696, 'region': 'APAC', 'action': 'play'}
Sent event: {'song_id': 303, 'timestamp': 1742131407.2401638, 'region': 'US', 'action': 'play'}
Sent event: {'song_id': 101, 'timestamp': 1742131408.5920622, 'region': 'US', 'action': 'play'}
Sent event: {'song_id': 303, 'timestamp': 1742131409.9380484, 'region': 'APAC', 'action': 'play'}
Sent event: {'song_id': 505, 'timestamp': 1742131411.2391183, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 303, 'timestamp': 1742131412.3047688, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 303, 'timestamp': 1742131413.710239, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 101, 'timestamp': 1742131415.1448805, 'region': 'US', 'action': 'play'}
Sent event: {'song_id': 202, 'timestamp': 1742131415.809675, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 303, 'timestamp': 1742131417.462571, 'region': 'APAC', 'action': 'play'}
Sent event: {'song_id': 202, 'timestamp': 1742131418.4222927, 'region': 'EU', 'action': 'play'}
Sent event: {'song_id': 101, 'timestamp': 1742131419.9028635, 'region': 'US', 'action': 'play'}
Sent event: {'song_id': 303, 'timestamp': 1742131421.6447933, 'region': 'US', 'action': 'play'}
```

=== Batch: 53 ===

window	region	song_id	count	rn
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	EU	101	4	1
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	EU	303	3	2
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	APAC	202	9	1
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	APAC	404	6	2
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	APAC	505	3	3

=== Batch: 54 ===

window	region	song_id	count	rn
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	US	404	3	1
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	EU	303	4	1
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	APAC	404	8	1
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	APAC	505	5	2
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	APAC	101	4	3

=== Batch: 55 ===

window	region	song_id	count	rn
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	US	404	5	1
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	US	303	4	2
{2025-03-16 18:20:00, 2025-03-16 18:25:00}	APAC	505	6	1

Changing processing window = 10 and action = skip:

```
Sent event: {'song_id': 202, 'timestamp': 1742132483.971048, 'region': 'APAC', 'action': 'skip'}
Sent event: {'song_id': 303, 'timestamp': 1742132485.3852394, 'region': 'EU', 'action': 'skip'}
Sent event: {'song_id': 202, 'timestamp': 1742132487.1861894, 'region': 'US', 'action': 'skip'}
Sent event: {'song_id': 303, 'timestamp': 1742132488.724495, 'region': 'US', 'action': 'skip'}
Sent event: {'song_id': 404, 'timestamp': 1742132489.2590125, 'region': 'APAC', 'action': 'skip'}
Sent event: {'song_id': 202, 'timestamp': 1742132489.817179, 'region': 'US', 'action': 'skip'}
Sent event: {'song_id': 303, 'timestamp': 1742132490.8205044, 'region': 'EU', 'action': 'skip'}
Sent event: {'song_id': 101, 'timestamp': 1742132491.550407, 'region': 'EU', 'action': 'skip'}
Sent event: {'song_id': 505, 'timestamp': 1742132492.4714904, 'region': 'US', 'action': 'skip'}
Sent event: {'song_id': 101, 'timestamp': 1742132493.760599, 'region': 'US', 'action': 'skip'}
Sent event: {'song_id': 404, 'timestamp': 1742132494.7340424, 'region': 'EU', 'action': 'skip'}
Sent event: {'song_id': 303, 'timestamp': 1742132495.7443326, 'region': 'US', 'action': 'skip'}
Sent event: {'song_id': 101, 'timestamp': 1742132496.2621634, 'region': 'US', 'action': 'skip'}
Sent event: {'song_id': 101, 'timestamp': 1742132497.2778294, 'region': 'APAC', 'action': 'skip'}
Sent event: {'song_id': 101, 'timestamp': 1742132498.5574765, 'region': 'APAC', 'action': 'skip'}
Sent event: {'song_id': 505, 'timestamp': 1742132499.2841802, 'region': 'EU', 'action': 'skip'}
Sent event: {'song_id': 505, 'timestamp': 1742132500.5503824, 'region': 'US', 'action': 'skip'}
Sent event: {'song_id': 303, 'timestamp': 1742132502.2499242, 'region': 'EU', 'action': 'skip'}
Sent event: {'song_id': 101, 'timestamp': 1742132503.1273937, 'region': 'EU', 'action': 'skip'}
Sent event: {'song_id': 202, 'timestamp': 1742132504.219621, 'region': 'APAC', 'action': 'skip'}
Sent event: {'song_id': 303, 'timestamp': 1742132505.3596017, 'region': 'APAC', 'action': 'skip'}
Sent event: {'song_id': 303, 'timestamp': 1742132506.2137785, 'region': 'EU', 'action': 'skip'}
Sent event: {'song_id': 505, 'timestamp': 1742132508.0419872, 'region': 'EU', 'action': 'skip'}
Sent event: {'song_id': 303, 'timestamp': 1742132508.741802, 'region': 'APAC', 'action': 'skip'}
Sent event: {'song_id': 303, 'timestamp': 1742132509.2430394, 'region': 'APAC', 'action': 'skip'}
Sent event: {'song_id': 505, 'timestamp': 1742132510.6334507, 'region': 'EU', 'action': 'skip'}
Sent event: {'song_id': 101, 'timestamp': 1742132512.5412135, 'region': 'APAC', 'action': 'skip'}
Sent event: {'song_id': 202, 'timestamp': 1742132513.621661, 'region': 'APAC', 'action': 'skip'}
```

=== Batch: 1 ===

window	region	song_id	count	rn
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	US	505	6	1
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	US	101	4	2
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	US	404	2	3
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	APAC	101	7	1
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	APAC	303	3	2
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	APAC	404	3	3
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	EU	404	6	1
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	EU	101	3	2
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	EU	303	2	3

=== Batch: 2 ===

window	region	song_id	count	rn
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	US	101	9	1
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	US	404	5	2
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	US	303	2	3
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	APAC	101	9	1
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	APAC	505	5	2
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	APAC	303	4	3
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	EU	101	4	1
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	EU	202	4	2
{2025-03-16 18:40:00, 2025-03-16 18:50:00}	EU	505	2	3

Changing processing window = 1 and action = like:


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Sent event: {'song_id': 101, 'timestamp': 1742132738.8126311, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 101, 'timestamp': 1742132740.2767653, 'region': 'US', 'action': 'like'}
Sent event: {'song_id': 202, 'timestamp': 1742132741.9351904, 'region': 'APAC', 'action': 'like'}
Sent event: {'song_id': 505, 'timestamp': 1742132743.462937, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 505, 'timestamp': 1742132744.1922467, 'region': 'APAC', 'action': 'like'}
Sent event: {'song_id': 202, 'timestamp': 1742132745.1633065, 'region': 'US', 'action': 'like'}
Sent event: {'song_id': 303, 'timestamp': 1742132746.432662, 'region': 'US', 'action': 'like'}
Sent event: {'song_id': 101, 'timestamp': 1742132748.0489056, 'region': 'APAC', 'action': 'like'}
Sent event: {'song_id': 101, 'timestamp': 1742132749.6085374, 'region': 'APAC', 'action': 'like'}
Sent event: {'song_id': 505, 'timestamp': 1742132750.710833, 'region': 'US', 'action': 'like'}
Sent event: {'song_id': 404, 'timestamp': 1742132751.7915943, 'region': 'US', 'action': 'like'}
Sent event: {'song_id': 505, 'timestamp': 1742132753.743974, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 202, 'timestamp': 1742132755.6569626, 'region': 'US', 'action': 'like'}
Sent event: {'song_id': 202, 'timestamp': 1742132757.0935955, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 101, 'timestamp': 1742132758.7727637, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 303, 'timestamp': 1742132760.6961782, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 101, 'timestamp': 1742132762.5910914, 'region': 'APAC', 'action': 'like'}
Sent event: {'song_id': 101, 'timestamp': 1742132763.3999567, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 303, 'timestamp': 1742132764.2623227, 'region': 'APAC', 'action': 'like'}
Sent event: {'song_id': 303, 'timestamp': 1742132765.5649834, 'region': 'US', 'action': 'like'}
Sent event: {'song_id': 505, 'timestamp': 1742132767.2324839, 'region': 'APAC', 'action': 'like'}
Sent event: {'song_id': 505, 'timestamp': 1742132769.2123146, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 404, 'timestamp': 1742132770.2822337, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 101, 'timestamp': 1742132770.9191701, 'region': 'APAC', 'action': 'like'}
Sent event: {'song_id': 303, 'timestamp': 1742132771.8311658, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 505, 'timestamp': 1742132772.8065312, 'region': 'APAC', 'action': 'like'}
Sent event: {'song_id': 202, 'timestamp': 1742132774.2981706, 'region': 'EU', 'action': 'like'}
Sent event: {'song_id': 303, 'timestamp': 1742132775.5040827, 'region': 'EU', 'action': 'like'}
```

=== Batch: 2 ===

```
+-----+-----+-----+-----+
|window|region|song_id|count|rn |
+-----+-----+-----+-----+
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|APAC |404 |5 |1 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|APAC |101 |2 |2 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|APAC |303 |1 |3 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|EU |404 |2 |1 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|EU |101 |2 |2 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|EU |505 |1 |3 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|US |303 |3 |1 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|US |404 |2 |2 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|US |101 |2 |3 |
+-----+-----+-----+-----+
```

=== Batch: 3 ===

```
+-----+-----+-----+-----+
|window|region|song_id|count|rn |
+-----+-----+-----+-----+
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|APAC |303 |2 |1 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|APAC |202 |1 |2 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|EU |404 |3 |1 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|EU |202 |3 |2 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|EU |303 |1 |3 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|US |303 |4 |1 |
|{2025-03-16 18:47:00, 2025-03-16 18:48:00}|US |101 |4 |2 |
+-----+-----+-----+-----+
```