In the selected time range, display:

Requirements

The fill level of the city water tank *Goals: range, filter* ☆	The number of open valve ☆☆☆☆ *Goals: last* *HINT: group, sum*	The most recent state of each valve. Use a green "1" to represent an open valve and a red "0" when is closed *Goals: last, custom function* ☆☆☆
The difference between the average water levels in two consecutive windows of one minute. ☆☆☆☆ *Goals: join, aggregateWindow, map* *HINT: timeShift*	The sum of the level of the 4 Tanks A1, A2, B1 and B2 *Goals:aggregate Window, map, and pivot*	**GAIN INDEPENCENCE** The fill level of each tank down sampled to 1 min *Goals: aggregateWindow* ☆☆
The speed of the pump that refills the city water tank *Goals: range, filter* ☆	The total flow rate from *Goals: last* *HINT: group, sum* ☆☆☆☆	The flow rate of each valve *Goals: last* ☆☆

Start: 2021-09-28 12:00:00.000 (UTC) - **Stop**: 2021-09-28 13:**30**:00.000 (UTC)

Test cases

Fill Level of City Water Tank	Open valve(s)	Current Status of Valve V1	Current Status of Valve V2	Current Status of Valve V3	Current Status of Valve V4
	4	1	1	1	1

Level difference every minute	Total Tanks' Levels	Fill Level of Tank A1	Fill Level of Tank A2	Fill Level of Tank B1	Fill Level of Tank B2

Pump Speed	Total flow rate	Flow Rate Valve V1	Flow Rate Valve V2	Flow Rate Valve V3	Flow Rate Valve V4
	750	100	200	250	200

Start: 2021-09-28 12:00:00.000 (UTC) - **Stop**: 2021-09-28 13:**40**:00.000 (UTC)

Fill Level of City Water Tank	Open valve(s)	Current Status of Valve V1	Current Status of Valve V2	Current Status of Valve V3	Current Status of Valve V4
	1	1	0	0	0

Level difference every minute	Total Tanks' Levels	Fill Level of Tank A1	Fill Level of Tank A2	Fill Level of Tank B1	Fill Level of Tank B2

Pump Speed	Total flow rate	Flow Rate Valve V1	Flow Rate Valve V2	Flow Rate Valve V3	Flow Rate Valve V4
	100	100	0	0	0