

1) Name of the branch which sent the maximum number of couriers in month of August.

Relational Algebra:

$$r1 \leftarrow \sigma_{<c_dispatch_date > 2020-08-01 \text{ AND } c_dispatch_date < 2020-08-31>} (courier)$$

$$r2 \leftarrow \mathcal{F}_{\max <c_dispatch_date>} (r1)$$

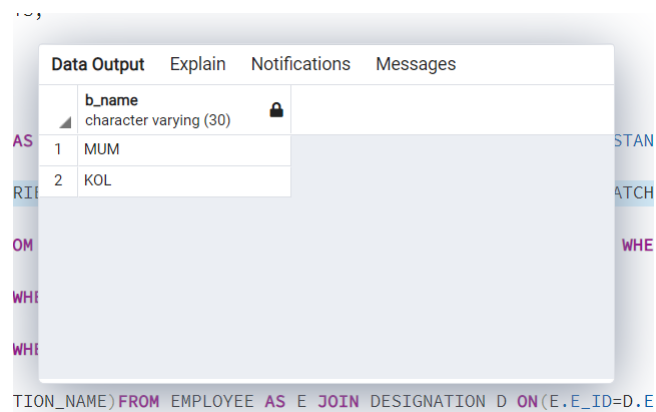
$$r3 \leftarrow \sigma_{<c_dispatch_date = r2>} Courier \bowtie_{<courier.B_ID=Branch.B_ID>} Branch$$

$$result \leftarrow \Pi_{B_Name} (r3)$$

SQL Code:

```
SELECT B_NAME FROM COURIER JOIN BRANCH ON
COURIER.B_ID=BRANCH.B_ID WHERE C_DISPATCH_DATE=(SELECT
MAX(C_DISPATCH_DATE) FROM COURIER WHERE C_DISPATCH_DATE
BETWEEN '#2020-08-01#' AND '#2020-08-19#');
```

Output:



Data Output		Explain	Notifications	Messages
	b_name character varying (30)			
1	MUM			
2	KOL			