

sms_sends table

column	type
ds	datetime
country	string
carrier	string
phone_number	integer
type	string

0	rogers	Guinea-Bissau	2020-08-17T03:22:53Z	001-890-853-0288x3664	confirmation
1	rogers	Luxembourg	2020-03-11T00:15:05Z	(216)929-2758x075	friend_request
2	verizon	Trinidad and Tobago	2020-06-20T03:42:25Z	+1-481-307-1156x6846	message
3	at&t	Jordan	2020-09-07T11:14:56Z	(937)026-8609	friend_request
4	sprint	Azerbaijan	2020-05-08T04:03:12Z	001-888-857-7136	confirmation

confirmers table

column	type
date	datetime

column **type**
 phone_number integer

index	date	phone_number
0	2020-08-17T03:22:53Z	001-890-853-0288x3664
1	2020-05-08T04:03:12Z	001-888-857-7136
2	2020-06-23T00:11:15Z	+1-868-242-1146x4456
3	2020-07-27T20:01:01Z	1444434504
4	2020-01-29T00:30:55Z	9021353406
5	2020-01-18T09:28:53Z	001-299-199-9252x118
6	2020-01-29T15:05:36Z	1684537177
7	2020-09-18T14:36:21Z	(148)794-7465x2039
8	2020-11-21T23:05:41Z	128.279.1933x3530

Q) Write a query to Calculate number of UNIQUE phone numbers that were sent as confirmation texts to on Feb 28th 2020 by carrier and country

Example:

columns **type**
 carrier string
 country string
 unique_numbers int

```
select count(distinct phone_number) from confirmers
```

```
where day(date) = 28 and month(date) = 02 and year(date) = 2020
```

3→ is the answer for above if you want to know more details then run the query below

```

SELECT carrier, country, COUNT(DISTINCT phone_number)
FROM sms_sends
WHERE type = 'confirmation'
AND ds BETWEEN '2020-02-28 00:00:00' AND '2020-02-28 23:59:59'
GROUP BY 1,2;

```

at&t	Sweden	1
rogers	Netherlands Antilles	1
sprint	United Kingdom	1

Q) Calculate what percentage of users were confirmed per day.

% of users confirmed per day = no of confirmation texts sent / no of confirmation texts confirmed

We need distinct phone numbers here not the distinct texts sent

Texts sent confirmed on same day (as timeframe not specified)

LEFT JOIN → get phone number and date → we can get confirmations on same day

```

SELECT ss.ds
, COUNT(DISTINCT c.phone_number)/COUNT(DISTINCT ss.phone_number)
FROM sms_sends AS ss
LEFT JOIN confirmers AS c
ON ss.phone_number = c.phone_number
AND ss.ds = c.date
WHERE type = 'confirmation'
GROUP BY 1

```

2020-01-02T19:38:37Z	1.0000
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2020-01-06T09:42:31Z	1.0000
2020-01-08T08:48:56Z	1.0000
2020-01-08T18:38:59Z	1.0000
2020-01-11T06:34:46Z	1.0000