D1:
SELECT
locations.location AS 'Country Name (CN)',
(
SELECT COUNT(DISTINCT date) - 1
FROM vaccination_records vax
WHERE vax.iso_code = vaccination_records.iso_code
AND vax.date <= vaccination_records.date
) AS 'Administered Vaccine On Day Number (DN)',
SUM(vaccination_records.daily_vaccinations) OVER (
PARTITION BY vaccination_records.iso_code
ORDER BY vaccination_records.date
ROWS BETWEEN UNBOUNDED PRECEDING AND CURRENT ROW
) AS 'Running total'
FROM
vaccination_records
JOIN
locations ON vaccination_records.iso_code = locations.iso_code
WHERE
vaccination_records.iso_code NOT LIKE 'OWID_%'
OR vaccination_records.iso_code IN
('OWID_CYN','OWID_ENG''OWID_KOS','OWID_WLS','OWID_NIR','OWID_SCT')
ORDER BY
locations.location, vaccination_records.date;

	Country Name (CN)	Administered Vaccine On Day Number (DN)	Running total
1	Afghanistan	0	0
2	Afghanistan	1	1367
3	Afghanistan	2	2734
4	Afghanistan	3	4101
5	Afghanistan	4	5468
6	Afghanistan	5	6835
7	Afghanistan	6	8202
8	Afghanistan	7	9782
9	Afghanistan	8	11576
10	Afghanistan	9	13584

Total rows loaded: 159197

D2:
SELECT
locations.location AS 'Country',
MAX(vax2.running_total) AS 'Cumulative Doses'
FROM (

```
SELECT
vaccination_records.iso_code,
SUM(vaccination_records.daily_vaccinations) AS running_total
FROM
vaccination_records
GROUP BY
vaccination_records.iso_code
) vax2
JOIN
locations ON vax2.iso_code = locations.iso_code
WHERE
vax2.iso_code NOT LIKE 'OWID_%'
OR vax2.iso_code IN
('OWID_CYN','OWID_ENG''OWID_KOS','OWID_WLS','OWID_NIR','OWID_SCT')
GROUP BY
locations.location
ORDER BY
MAX(vax2.running_total) DESC;
```

Total rows loaded: 221

	Country	Cumulative Doses
1	China	3489857504
2	India	2207170128
3	United States	676752536
4	Brazil	486443880
5	Indonesia	447564833
6	Japan	383744042
7	Bangladesh	358785293
8	Pakistan	338929030
9	Vietnam	266414107
10	Mexico	221234504

```
D3:
SELECT
vaccine_by_country.vaccines AS 'Vaccine Type',
locations.location AS 'Country'
FROM
vaccine_by_country
JOIN
```

locations ON vaccine_by_country.iso_code = locations.iso_code
ORDER BY
vaccine_by_country.vaccines, locations.location;

	Vaccine Type	Country	
1	CanSino	Iran	
2	Covaxin	Afghanistan	
3	Covaxin	Bahrain	
4	Covaxin	Djibouti	
5	Covaxin	Egypt	
6	Covaxin	India	
7	Covaxin	Iran	
8	Covaxin	Iraq	
9	Covaxin	Jordan	
10	Covaxin	Kuwait	

Total rows loaded: 955

D4:
SELECT
locations.source_website AS "Source Name (URL)",
SUM(max_values.max_total_vaccinations) AS "Largest total Administered Vaccines"
FROM
locations
JOIN
(
SELECT
iso_code,
MAX(total_vaccinations) AS max_total_vaccinations
FROM
vaccination_records
GROUP BY
iso_code
) max_values ON locations.iso_code = max_values.iso_code
WHERE
locations.iso_code NOT IN (
'OWID_AFR', 'OWID_ASI', 'OWID_EUR', 'OWID_EUN', 'OWID_SAM',
'OWID_HIC', 'OWID_LIC', 'OWID_LMC', 'OWID_NAM', 'OWID_OCE',
'OWID_UMC', 'OWID_WRL'

```
)
GROUP BY
locations.source_website
HAVING
SUM(max_values.max_total_vaccinations) = (
SELECT
MAX(sum_total_vaccinations)
FROM
(
SELECT
locations.source_website,
SUM(max_values.max_total_vaccinations) AS sum_total_vaccinations
FROM
locations
JOIN
(
SELECT
iso_code,
MAX(total_vaccinations) AS max_total_vaccinations
FROM
vaccination_records
GROUP BY
iso_code
) max_values ON locations.iso_code = max_values.iso_code
WHERE
locations.iso_code NOT IN (
'OWID_AFR', 'OWID_ASI', 'OWID_EUR', 'OWID_EUN', 'OWID_SAM',
'OWID_HIC', 'OWID_LIC', 'OWID_LMC', 'OWID_NAM', 'OWID_OCE',
'OWID_UMC', 'OWID_WRL'
)
GROUP BY
locations.source_website
) max_sums
)
ORDER BY
"Largest total Administered Vaccines" DESC;
```

Source Name (URL)	Largest total Administered Vaccines
1 https://data.cdc.gov/Vaccinations/COVID-19-Vaccination-Trends-in-the-United-States-N/...	676728782

Total rows loaded: 1

D5:
```
SELECT
strftime('%Y-%m', vaccination_records.date) AS Date,
MAX(CASE WHEN locations.location = 'Australia' THEN
vaccination_records.people_fully_vaccinated END) AS Australia,
```

```
MAX(CASE WHEN locations.location = 'United States' THEN
vaccination_records.people_fully_vaccinated END) AS "United States",
MAX(CASE WHEN locations.location = 'England' THEN
vaccination_records.people_fully_vaccinated END) AS England,
MAX(CASE WHEN locations.location = 'New Zealand' THEN
vaccination_records.people_fully_vaccinated END) AS "New Zealand"
FROM
vaccination_records
JOIN
locations ON vaccination_records.iso_code = locations.iso_code
WHERE
vaccination_records.date >= '2022-01-01' AND vaccination_records.date < '2023-01-01'
AND vaccination_records.iso_code IN ('AUS', 'USA', 'OWID_ENG', 'NZL')
GROUP BY
strftime('%Y-%m', vaccination_records.date)
ORDER BY
strftime('%Y-%m', vaccination_records.date);
```

Total rows loaded: 12

	Date	Australia	United States	England	New Zealand
1	2022-01		215215443	40630005	3926219
2	2022-02	20483240	218330536	41146925	3963541
3	2022-03	21240452	219898973	41533968	4056323
4	2022-04	21527099	221433810	41808368	4093200
5	2022-05	21614599	222623670	42026346	4103068
6	2022-06		223512235	42170260	4113618
7	2022-07		224439379	42463117	4126090
8	2022-08		225287976	42634817	4130291
9	2022-09		226506045	42709856	4132703
10	2022-10		227924209	42800762	4134917