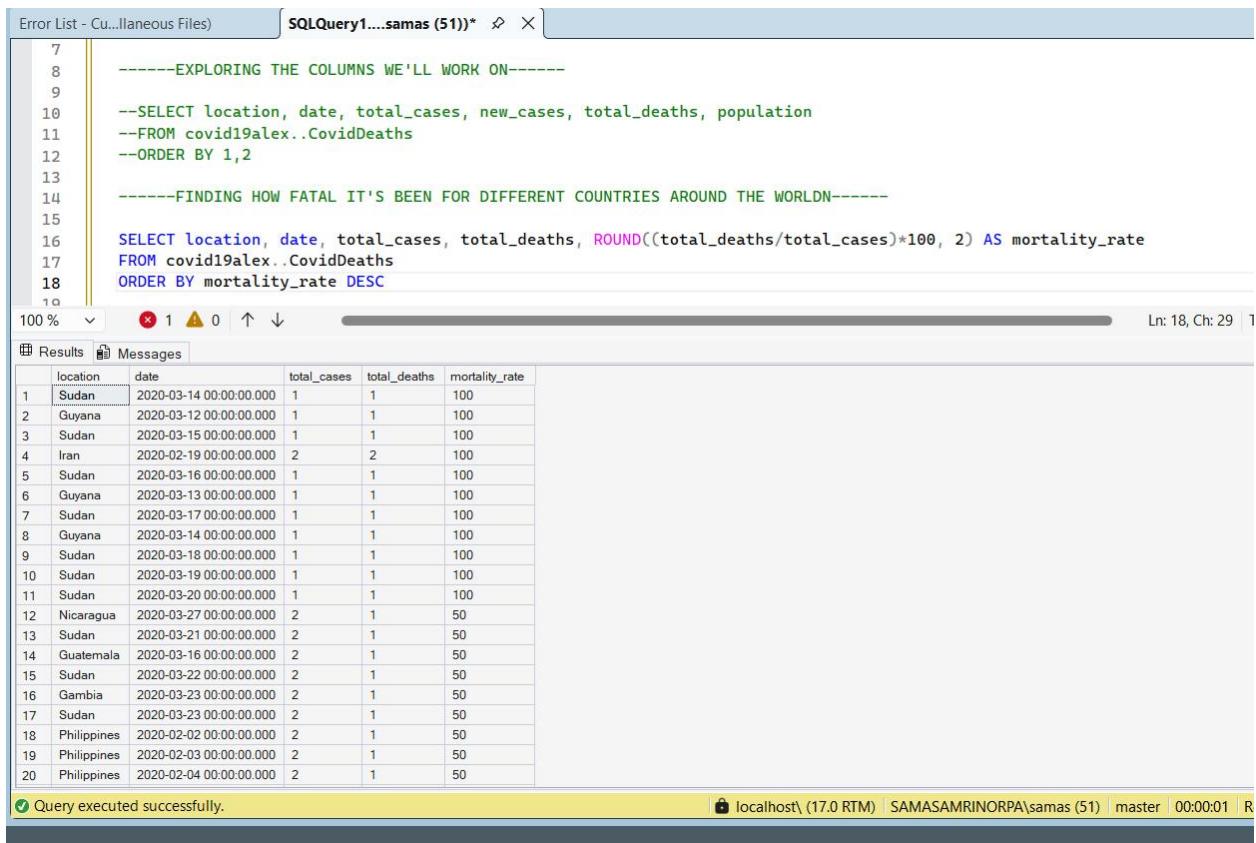


## Which countries had the peak mortality rate during Covid19?



The screenshot shows a SQL Server Management Studio window with a query editor and a results grid. The query editor contains a script to find countries with the highest mortality rates. The results grid displays 20 rows of data with columns: location, date, total\_cases, total\_deaths, and mortality\_rate. The mortality\_rate column shows values ranging from 50 to 100%.

```
7 -----EXPLORING THE COLUMNS WE'LL WORK ON-----
8
9
10 --SELECT location, date, total_cases, new_cases, total_deaths, population
11 --FROM covid19alex..CovidDeaths
12 --ORDER BY 1,2
13
14 -----FINDING HOW FATAL IT'S BEEN FOR DIFFERENT COUNTRIES AROUND THE WORLDN-----
15
16 SELECT location, date, total_cases, total_deaths, ROUND((total_deaths/total_cases)*100, 2) AS mortality_rate
17 FROM covid19alex..CovidDeaths
18 ORDER BY mortality_rate DESC
```

	location	date	total_cases	total_deaths	mortality_rate
1	Sudan	2020-03-14 00:00:00.000	1	1	100
2	Guyana	2020-03-12 00:00:00.000	1	1	100
3	Sudan	2020-03-15 00:00:00.000	1	1	100
4	Iran	2020-02-19 00:00:00.000	2	2	100
5	Sudan	2020-03-16 00:00:00.000	1	1	100
6	Guyana	2020-03-13 00:00:00.000	1	1	100
7	Sudan	2020-03-17 00:00:00.000	1	1	100
8	Guyana	2020-03-14 00:00:00.000	1	1	100
9	Sudan	2020-03-18 00:00:00.000	1	1	100
10	Sudan	2020-03-19 00:00:00.000	1	1	100
11	Sudan	2020-03-20 00:00:00.000	1	1	100
12	Nicaragua	2020-03-27 00:00:00.000	2	1	50
13	Sudan	2020-03-21 00:00:00.000	2	1	50
14	Guatemala	2020-03-16 00:00:00.000	2	1	50
15	Sudan	2020-03-22 00:00:00.000	2	1	50
16	Gambia	2020-03-23 00:00:00.000	2	1	50
17	Sudan	2020-03-23 00:00:00.000	2	1	50
18	Philippines	2020-02-02 00:00:00.000	2	1	50
19	Philippines	2020-02-03 00:00:00.000	2	1	50
20	Philippines	2020-02-04 00:00:00.000	2	1	50

Query executed successfully. | localhost\ (17.0 RTM) | SAMASAMRINORPA\samas (51) | master | 00:00:01 | R

From the query results, we can see that countries like Sudan, Guyana, Iran, Nicaragua, Guatemala, Gambia, and Philippines were suffering the most from the highest mortality rates (50-100%) during the February–March period of 2020.

What about Canada? How was it doing in terms of mortality rate from Covid19?

Error List - Cu...llaneous Files) SQLQuery1...samas (51)\* X

```

13 -----FINDING HOW FATAL IT'S BEEN FOR DIFFERENT COUNTRIES AROUND THE WORLDN-----
14
15
16 --SELECT location, date, total_cases, total_deaths, ROUND((total_deaths/total_cases)*100, 2) AS mortality_rate
17 --FROM covid19alex..CovidDeaths
18 --ORDER BY mortality_rate DESC
19
20 -----LET'S SEE HOW IT WAS FOR CANADA-----
21 SELECT location, date, total_cases, total_deaths, ROUND((total_deaths/total_cases)*100, 2) AS mortality_rate
22 FROM covid19alex..CovidDeaths
23 WHERE location = 'Canada'
24 ORDER BY mortality_rate DESC
25

```

100% ① 1 ▲ 0 ↑ ↓ Ln: 23, Ch: 25 T

Results Messages

	location	date	total_cases	total_deaths	mortality_rate
1	Canada	2020-05-28 00:00:00.000	89976	7717	8.58
2	Canada	2020-05-29 00:00:00.000	90909	7797	8.58
3	Canada	2020-05-30 00:00:00.000	91681	7857	8.57
4	Canada	2020-05-31 00:00:00.000	92479	7906	8.55
5	Canada	2020-05-27 00:00:00.000	88989	7606	8.55
6	Canada	2020-05-26 00:00:00.000	88090	7512	8.53
7	Canada	2020-06-06 00:00:00.000	96475	8228	8.53
8	Canada	2020-06-04 00:00:00.000	95269	8126	8.53
9	Canada	2020-05-25 00:00:00.000	87119	7420	8.52
10	Canada	2020-06-01 00:00:00.000	93288	7952	8.52
11	Canada	2020-06-02 00:00:00.000	93960	8008	8.52
12	Canada	2020-06-03 00:00:00.000	94641	8062	8.52
13	Canada	2020-05-20 00:00:00.000	81575	6950	8.52
14	Canada	2020-05-21 00:00:00.000	82742	7046	8.52
15	Canada	2020-05-22 00:00:00.000	83947	7144	8.51
16	Canada	2020-05-16 00:00:00.000	77206	6571	8.51
17	Canada	2020-05-24 00:00:00.000	86106	7326	8.51
18	Canada	2020-06-07 00:00:00.000	97178	8269	8.51
19	Canada	2020-06-05 00:00:00.000	95947	8166	8.51
20	Canada	2020-06-08 00:00:00.000	97779	8313	8.5

Query executed successfully. localhost\ (17.0 RTM) SAMASAMRINORPA\samas (51) master 00:00:00

So, interestingly, the worst Canada had was in the May-June period where its highest mortality rate from Covid was around 8.5%. Still not as bad as it was for some other countries round the world, thankfully.

But when was the highest number of deaths?

Error List - Cu...llaneous Files) SQLQuery1...samas (51)\* X

```

19 -----LET'S SEE HOW IT WAS FOR CANADA-----
20
21 --SELECT location, date, total_cases, total_deaths, ROUND((total_deaths/total_cases)*100, 2) AS mortality_rate
22 --FROM covid19alex..CovidDeaths
23 --WHERE location = 'Canada'
24 --ORDER BY mortality_rate DESC
25
26 -----What about the number of deaths? When was that the highest in Canada?-----
27 SELECT location, date, total_cases, total_deaths, ROUND((total_deaths/total_cases)*100, 2) AS mortality_rate
28 FROM covid19alex..CovidDeaths
29 WHERE location = 'Canada'
30 ORDER BY CAST(total_deaths AS INT) DESC
31

```

100% ① No issues found Ln: 29, Ch: 26

Results Messages

	location	date	total_cases	total_deaths	mortality_rate
1	Canada	2021-04-30 00:00:00.000	1228367	24220	1.97
2	Canada	2021-04-29 00:00:00.000	1220108	24165	1.98
3	Canada	2021-04-28 00:00:00.000	1210918	24110	1.99
4	Canada	2021-04-27 00:00:00.000	1202672	24048	2
5	Canada	2021-04-26 00:00:00.000	1195827	24011	2.01
6	Canada	2021-04-25 00:00:00.000	1186991	23950	2.02
7	Canada	2021-04-24 00:00:00.000	1180065	23912	2.03
8	Canada	2021-04-23 00:00:00.000	1172697	23870	2.04
9	Canada	2021-04-22 00:00:00.000	1164108	23810	2.05
10	Canada	2021-04-21 00:00:00.000	1155053	23761	2.06
11	Canada	2021-04-20 00:00:00.000	1146817	23698	2.07
12	Canada	2021-04-19 00:00:00.000	1139591	23649	2.08
13	Canada	2021-04-18 00:00:00.000	1129371	23611	2.09
14	Canada	2021-04-17 00:00:00.000	1121162	23572	2.1
15	Canada	2021-04-16 00:00:00.000	1113837	23531	2.11
16	Canada	2021-04-15 00:00:00.000	1104508	23482	2.13
17	Canada	2021-04-14 00:00:00.000	1094899	23428	2.14
18	Canada	2021-04-13 00:00:00.000	1085905	23370	2.15
19	Canada	2021-04-12 00:00:00.000	1078482	23336	2.16
20	Canada	2021-04-11 00:00:00.000	1067764	23294	2.18

Query executed successfully. localhost\ (17.0 RTM) SAMASAMRINORPA\samas (51) master 00:00:00

Surprisingly, the most deaths it saw was in April of next year (2021). Even though the death percentage was around only 2%, over 23 thousand people died per day! We had to convert the ‘total\_deaths’ column into INT here since its original data type was set as STRING, leading to erroneous results.

Now let’s take a look at Bangladesh, on the other side of the world, struggling from the same pandemic.

The screenshot shows a SQL query window titled 'SQLQuery1...samas (51)\*'. It contains two queries. The first query is for Canada, and the second is for Bangladesh. Both queries select location, date, total\_cases, total\_deaths, and calculate a mortality\_rate using the formula  $\text{ROUND}((\text{total\_deaths}/\text{total\_cases}) * 100, 2)$ . The results are ordered by mortality\_rate in descending order. The results table has columns: location, date, total\_cases, total\_deaths, and mortality\_rate. The data shows various dates from March 25 to April 18, 2020, with locations like Bangladesh and Canada, and mortality rates ranging from 7.41% to 12.82%.

	location	date	total_cases	total_deaths	mortality_rate
1	Bangladesh	2020-03-25 00:00:00.000	39	5	12.82
2	Bangladesh	2020-04-04 00:00:00.000	70	8	11.43
3	Bangladesh	2020-03-26 00:00:00.000	44	5	11.36
4	Bangladesh	2020-04-01 00:00:00.000	54	6	11.11
5	Bangladesh	2020-04-02 00:00:00.000	56	6	10.71
6	Bangladesh	2020-03-27 00:00:00.000	48	5	10.42
7	Bangladesh	2020-03-28 00:00:00.000	48	5	10.42
8	Bangladesh	2020-03-29 00:00:00.000	48	5	10.42
9	Bangladesh	2020-04-07 00:00:00.000	164	17	10.37
10	Bangladesh	2020-03-24 00:00:00.000	39	4	10.26
11	Bangladesh	2020-04-05 00:00:00.000	88	9	10.23
12	Bangladesh	2020-03-30 00:00:00.000	49	5	10.2
13	Bangladesh	2020-04-03 00:00:00.000	61	6	9.84
14	Bangladesh	2020-03-31 00:00:00.000	51	5	9.8
15	Bangladesh	2020-04-06 00:00:00.000	123	12	9.76
16	Bangladesh	2020-04-08 00:00:00.000	218	20	9.17
17	Bangladesh	2020-03-23 00:00:00.000	33	3	9.09
18	Bangladesh	2020-03-21 00:00:00.000	25	2	8
19	Bangladesh	2020-03-22 00:00:00.000	27	2	7.41
20	Bangladesh	2020-03-18 00:00:00.000	14	1	7.14

As expected, its worst mortality rate is much higher than Canada’s - 12.82% instead of 8.58%. They struggled with this the most around March-April period of 2020.

And when did most people die from Covid there?

Error List - Cu...llaneous Files] [SQLQuery1....samas (51))\*

```

30    --ORDER BY CAST(total_deaths AS INT) DESC
31
32    -----What about Bangladesh? When was its highest mortality rate?-----
33    --SELECT location, date, total_cases, total_deaths, ROUND((total_deaths/total_cases)*100, 2) AS mortality_rate
34    --FROM covid19alex..CovidDeaths
35    --WHERE location = 'Bangladesh'
36    --ORDER BY mortality_rate DESC
37
38    -----And What about the number of deaths? When was that the highest in Bangladesh?-----
39    SELECT location, date, total_cases, total_deaths, ROUND((total_deaths/total_cases)*100, 2) AS mortality_rate
40    FROM covid19alex..CovidDeaths
41    WHERE location = 'Bangladesh'
42    ORDER BY CAST(total_deaths AS INT) DESC

```

100 % ▾ No issues found Ln: 41, Ch: 29 TABS

Results Messages

	location	date	total_cases	total_deaths	mortality_rate
1	Bangladesh	2021-04-30 00:00:00.000	759132	11450	1.51
2	Bangladesh	2021-04-29 00:00:00.000	756955	11393	1.51
3	Bangladesh	2021-04-28 00:00:00.000	754614	11305	1.5
4	Bangladesh	2021-04-27 00:00:00.000	751659	11228	1.49
5	Bangladesh	2021-04-26 00:00:00.000	748628	11150	1.49
6	Bangladesh	2021-04-25 00:00:00.000	745322	11053	1.48
7	Bangladesh	2021-04-24 00:00:00.000	742400	10952	1.48
8	Bangladesh	2021-04-23 00:00:00.000	739703	10869	1.47
9	Bangladesh	2021-04-22 00:00:00.000	736074	10781	1.46
10	Bangladesh	2021-04-21 00:00:00.000	732060	10683	1.46
11	Bangladesh	2021-04-20 00:00:00.000	727780	10588	1.45
12	Bangladesh	2021-04-19 00:00:00.000	723221	10497	1.45
13	Bangladesh	2021-04-18 00:00:00.000	718950	10385	1.44
14	Bangladesh	2021-04-17 00:00:00.000	715252	10283	1.44
15	Bangladesh	2021-04-16 00:00:00.000	711779	10182	1.43
16	Bangladesh	2021-04-15 00:00:00.000	707362	10081	1.43
17	Bangladesh	2021-04-14 00:00:00.000	703170	9987	1.42
18	Bangladesh	2021-04-13 00:00:00.000	697985	9891	1.42
19	Bangladesh	2021-04-12 00:00:00.000	691957	9822	1.42
20	Bangladesh	2021-04-11 00:00:00.000	684756	9739	1.42

Query executed successfully. | localhost\ (17.0 RTM) | SAMASAMRINORPA\samas (51) | master | 00:00:00 Rows: 20

Thankfully, it was around half of what it was in Canada - 11,000 daily deaths instead of 23,000. However, they both were around the same timeframe - April of 2021 - when possibly the second wave of Covid19 hit the world with its new variants.