```
-- calculation of first year losses to previous year war population ratio for each country
WITH previous_year_population AS(
 SELECT row_number, Name, year AS current_year,
 population AS current_population,
 LAG(population) OVER(PARTITION BY Name ORDER BY year) AS previous_year_population
 FROM `bubbly-tractor-391309.pet_project.population_war_country_1974_2023_melted`
SELECT pp.row_number, pp.Name, pp.current_year, pp.current_population,
pp.previous_year_population, m.migrants,
  ROUND(m.migrants*100/pp.previous_year_population, 2) AS first_year_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHERE (pp.Name='Afghanistan' AND pp.current_year=1981)
  OR (pp.Name='Lebanon' AND pp.current_year=1975)
  OR (pp.Name='Croatia' AND pp.current_year=1991)
 OR (pp.Name='Serbia' AND pp.current_year=1991)
 OR (pp.Name='Slovenia' AND pp.current_year=1991)
 OR (pp.Name='Montenegro' AND pp.current_year=1992)
 OR (pp.Name='Bosnia and Herzegovina' AND pp.current_year=1992)
 OR (pp.Name='Rwanda' AND pp.current_year=1994)
 OR (pp.Name='North Macedonia' AND pp.current_year=2001)
 OR (pp.Name='Iraq' AND pp.current_year=2003)
 OR (pp.Name='Libya' AND pp.current_year=2011)
 OR (pp.Name='Syria' AND pp.current_year=2012)
  OR (pp.Name='Ukraine' AND pp.current_year=2022)
ORDER BY first_year_ratio;
-- calculation of total war years losses to the previous war year population ratio
WITH previous_year_population AS(
 SELECT row_number, Name, year AS current_year,
 population AS current_population,
 LAG(population) OVER(PARTITION BY Name ORDER BY year) AS previous_year_population
 FROM `bubbly-tractor-391309.pet_project.population_war_country_1974_2023_melted`
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year BETWEEN 2014 AND 2023 THEN m.migrants ELSE 0 END) AS
total_migrants,
 SUM(CASE WHEN pp.current_year=2014 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year BETWEEN 2014 AND 2023 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=2014 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHERE
 pp.Name='Ukraine' AND pp.current_year BETWEEN 2014 AND 2023
GROUP BY pp.Name
UNION ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year BETWEEN 1975 AND 1990 THEN m.migrants ELSE 0 END) AS
total_migrants,
  SUM(CASE WHEN pp.current_year=1975 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year BETWEEN 1975 AND 1990 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=1975 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
```

```
WHFRF
 pp.Name='Lebanon' AND pp.current_year BETWEEN 1975 AND 1990
GROUP BY pp.Name
UNION ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year BETWEEN 1974 AND 1989 THEN m.migrants ELSE 0 END) AS
total_migrants,
 SUM(CASE WHEN pp.current_year=1975 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year BETWEEN 1974 AND 1989 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=1975 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHFRF
 pp.Name='Afghanistan' AND pp.current_year BETWEEN 1974 AND 1989
GROUP BY pp.Name
UNION ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year BETWEEN 1991 AND 1995 THEN m.migrants ELSE 0 END) AS
total_migrants,
 SUM(CASE WHEN pp.current_year=1991 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year BETWEEN 1991 AND 1995 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=1991 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHERE
 pp.Name='Croatia' AND pp.current_year BETWEEN 1991 AND 1995
GROUP BY pp.Name
UNION ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year BETWEEN 1991 AND 2001 THEN m.migrants ELSE 0 END) AS
total_migrants,
  SUM(CASE WHEN pp.current_year=1991 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year BETWEEN 1991 AND 2001 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=1991 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHERE
 pp.Name='Serbia' AND pp.current_year BETWEEN 1991 AND 2001
GROUP BY pp.Name
UNION ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year=1991 THEN m.migrants ELSE 0 END) AS total_migrants,
  SUM(CASE WHEN pp.current_year=1991 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year=1991 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=1991 THEN pp.previous_year_population ELSE 0 END), 2)
```

```
AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHFRF
 pp.Name='Slovenia' AND pp.current_year=1991
GROUP BY pp.Name
UNTON ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year BETWEEN 1991 AND 1992 THEN m.migrants ELSE 0 END) AS
total_migrants,
 SUM(CASE WHEN pp.current_year=1991 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year BETWEEN 1991 AND 1992 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=1991 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHFRF
 pp.Name='Montenegro' AND pp.current_year BETWEEN 1991 AND 1992
GROUP BY pp.Name
UNION ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year BETWEEN 1992 AND 1995 THEN m.migrants ELSE 0 END) AS
total_migrants,
 SUM(CASE WHEN pp.current_year=1992 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
  ROUND(SUM(CASE WHEN pp.current_year BETWEEN 1992 AND 1995 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=1992 THEN pp.previous_year_population ELSE 0 END), 2)
  AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHERE
 pp.Name='Bosnia and Herzegovina' AND pp.current_year BETWEEN 1992 AND 1995
GROUP BY pp.Name
UNION ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year=1994 THEN m.migrants ELSE 0 END) AS total_migrants,
  SUM(CASE WHEN pp.current_year=1994 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year=1994 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=1994 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHERE
 pp.Name='Rwanda' AND pp.current_year=1994
GROUP BY pp.Name
UNION ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year=2001 THEN m.migrants ELSE 0 END) AS total_migrants,
```

```
SUM(CASE WHEN pp.current_year=2001 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year=2001 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=2001 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
 pp.Name='North Macedonia' AND pp.current_year=2001
GROUP BY pp.Name
UNTON ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year BETWEEN 2003 AND 2011 THEN m.migrants ELSE 0 END) AS
total_migrants,
 SUM(CASE WHEN pp.current_year=2003 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year BETWEEN 2003 AND 2011 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=2003 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHERE
 pp.Name='Iraq' AND pp.current_year BETWEEN 2003 AND 2011
GROUP BY pp.Name
UNION ALL
SELECT pp.Name,
 SUM(CASE WHEN pp.current_year=2011 THEN m.migrants ELSE 0 END) AS total_migrants,
 SUM(CASE WHEN pp.current_year=2011 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year=2011 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=2011 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHERE
 pp.Name='Libya' AND pp.current_year=2011
GROUP BY pp.Name
UNION ALL
SELECT pp.Name,
  SUM(CASE WHEN pp.current_year BETWEEN 2011 AND 2023 THEN m.migrants ELSE 0 END) AS
total_migrants,
  SUM(CASE WHEN pp.current_year=2011 THEN pp.previous_year_population ELSE 0 END) AS
previous_war_population,
 ROUND(SUM(CASE WHEN pp.current_year BETWEEN 2011 AND 2023 THEN m.migrants ELSE 0 END)*100/
        SUM(CASE WHEN pp.current_year=2011 THEN pp.previous_year_population ELSE 0 END), 2)
 AS total_loss_ratio
FROM previous_year_population pp
JOIN `bubbly-tractor-391309.pet_project.migrants_war_country_1974_2023_melted` m
ON pp.row_number=m.row_number
WHERE
 pp.Name='Syria' AND pp.current_year BETWEEN 2011 AND 2023
GROUP BY pp.Name;
```