**SQL Queries using Microsoft Sql Server**

**Graph number 1 (Total CY Shootings)**

**query:**

SELECT count(id) FROM police\_shootings

where YEAR(date) = '2022'

**result:**



**query:**

SELECT

FORMAT((s2.ShootingsCount - s1.ShootingsCount) \* 1.0 / s1.ShootingsCount \* 100, 'N2') + '%' AS YoYShootings

FROM

(

SELECT COUNT(id) AS ShootingsCount

FROM police\_shootings

WHERE YEAR(Date) = 2021

) AS s1,

(

SELECT COUNT(id) AS ShootingsCount

FROM police\_shootings

WHERE YEAR(Date) = 2022

) AS s2;

**results:**



**Graph number 2 (CY Attacks on officers)**

**querry:**

select count(id) as CY\_attacks\_on\_officers from police\_shootings

where YEAR(date)='2022' and threat\_level='attack'

**results:**



**query:**

SELECT

FORMAT((s2.ShootingsCount - s1.ShootingsCount) \* 1.0 / s1.ShootingsCount \* 100, 'N2') + '%' AS YoYShootings

FROM

(

SELECT COUNT(id) AS ShootingsCount

FROM police\_shootings

WHERE YEAR(Date) = 2021 and threat\_level='attack'

) AS s1,

(

SELECT COUNT(id) AS ShootingsCount

FROM police\_shootings

WHERE YEAR(Date) = 2022 and threat\_level='attack'

) AS s2;

**results:**



**Graph number 3 (CY car chases)**

**query:**

select count(id) as CY\_car\_chases from police\_shootings

where YEAR(date)='2022' and flee='car'

**results:**



**query:**

SELECT

FORMAT((s2.ShootingsCount - s1.ShootingsCount) \* 1.0 / s1.ShootingsCount \* 100, 'N2') + '%' AS YoYCarChases

FROM

(

SELECT COUNT(id) AS ShootingsCount

FROM police\_shootings

WHERE YEAR(Date) = 2021 and flee='car'

) AS s1,

(

SELECT COUNT(id) AS ShootingsCount

FROM police\_shootings

WHERE YEAR(Date) = 2022 and flee='car'

) AS s2;

**results;**



**Graph number 4 (CY flee on foot)**

**query:**

select count(id) as CY\_flee\_on\_foot from police\_shootings

where YEAR(date)='2022' and flee='foot'

**results:**



**query:**

SELECT

FORMAT((s2.ShootingsCount - s1.ShootingsCount) \* 1.0 / s1.ShootingsCount \* 100, 'N2') + '%' AS YoYFleeOnFoot

FROM

(

SELECT COUNT(id) AS ShootingsCount

FROM police\_shootings

WHERE YEAR(Date) = 2021 and flee='foot'

) AS s1,

(

SELECT COUNT(id) AS ShootingsCount

FROM police\_shootings

WHERE YEAR(Date) = 2022 and flee='foot'

) AS s2;

**results:**



**Graph number 5 (CY direct combat)**

**query:**

select count(id) as CY\_direct\_combat from police\_shootings

where YEAR(date)='2022' and flee='Not fleeing'

**results:**



**query:**

SELECT

FORMAT((s2.ShootingsCount - s1.ShootingsCount) \* 1.0 / s1.ShootingsCount \* 100, 'N2') + '%' AS YoYDirectCombat

FROM

(

SELECT COUNT(id) AS ShootingsCount

FROM police\_shootings

WHERE YEAR(Date) = 2021 and flee='Not fleeing'

) AS s1,

(

SELECT COUNT(id) AS ShootingsCount

FROM police\_shootings

WHERE YEAR(Date) = 2022 and flee='Not fleeing'

) AS s2;

**results:**



**Graph number 6 (Suspects weapons)**

SELECT

CASE

WHEN armed IN ('baseball bat','baseball bat and bottle','baseball bat and fireplace poker','baseball bat and knife','hammer','hammer and garden tool','hatchet and gun','metal hand tool','metal object','metal pipe','metal pole','metal rake','metal stick','pipe') THEN 'Bats and Hammers'

WHEN armed IN ('air conditioner','barstool','baton','beer bottle','binoculars','blunt object','bottle','bow and arrow','brick','chain','chain saw','chainsaw','chair','claimed to be armed','contractors level','cordless drill','crossbow','crowbar','flagpole','garden tool','glass shard','hand torch','hatchet','ice pick','incendiary device','incendiary weapon','microphone','motorcycle','oar','pen','pepper spray','pick-axe','piece of wood','pitchfork','pole','railroad spikes','rock','screwdriver','sharp object','shovel','spear','stake','stapler','straight edge razor','Taser','tire iron','toy weapon','walking stick','wasp spray','wrench') THEN 'Different\_Objects'

WHEN armed IN ('air pistol','Airsoft pistol','BB gun','BB gun and vehicle','bean-bag gun','fireworks','flare gun','flashlight','gun','gun and car','gun and knife','gun and machete','gun and sword','gun and vehicle','gun and explosives','machete and gun','nail gun','pellet gun') THEN 'Guns'

WHEN armed IN ('ax','box cutter','knife','knife and vehicle','knife,hammer and gasoline can','lawn mower blade','machete','machete and hammer','meat cleaver','pair of scissors','pole and knife','samurai sword','sword') THEN 'Knives'

WHEN armed IN ('unarmed','undetermined','unknown weapon') THEN 'Unknown'

WHEN armed IN ('car,knife and mace','carjack','vehicle','vehicle and gun','vehicle and machete') THEN 'Vehicles'

ELSE 'Other'

END AS weapons\_groups,

COUNT(id) AS CY\_shootings

FROM police\_shootings

WHERE YEAR(date)='2022'

GROUP BY

CASE

WHEN armed IN ('baseball bat','baseball bat and bottle','baseball bat and fireplace poker','baseball bat and knife','hammer','hammer and garden tool','hatchet and gun','metal hand tool','metal object','metal pipe','metal pole','metal rake','metal stick','pipe') THEN 'Bats and Hammers'

WHEN armed IN ('air conditioner','barstool','baton','beer bottle','binoculars','blunt object','bottle','bow and arrow','brick','chain','chain saw','chainsaw','chair','claimed to be armed','contractors level','cordless drill','crossbow','crowbar','flagpole','garden tool','glass shard','hand torch','hatchet','ice pick','incendiary device','incendiary weapon','microphone','motorcycle','oar','pen','pepper spray','pick-axe','piece of wood','pitchfork','pole','railroad spikes','rock','screwdriver','sharp object','shovel','spear','stake','stapler','straight edge razor','Taser','tire iron','toy weapon','walking stick','wasp spray','wrench') THEN 'Different\_Objects'

WHEN armed IN ('air pistol','Airsoft pistol','BB gun','BB gun and vehicle','bean-bag gun','fireworks','flare gun','flashlight','gun','gun and car','gun and knife','gun and machete','gun and sword','gun and vehicle','gun and explosives','machete and gun','nail gun','pellet gun') THEN 'Guns'

WHEN armed IN ('ax','box cutter','knife','knife and vehicle','knife,hammer and gasoline can','lawn mower blade','machete','machete and hammer','meat cleaver','pair of scissors','pole and knife','samurai sword','sword') THEN 'Knives'

WHEN armed IN ('unarmed','undetermined','unknown weapon') THEN 'Unknown'

WHEN armed IN ('car,knife and mace','carjack','vehicle','vehicle and gun','vehicle and machete') THEN 'Vehicles'

ELSE 'Other'

END;

**results:**



**Graph number 7 (CY Shootings vs Previous Year Shootings monthly trend)-we get separate data for current and previous year, for example here is for 2021**

**query:**

SELECT

DATENAME(month, date) AS Month\_Name,

COUNT(id) AS CY\_shootings

FROM

police\_shootings

WHERE

YEAR(date) = '2021'

GROUP BY

DATENAME(month, date),

MONTH(date)

ORDER BY

MONTH(date);

**results:**



**Graph number 8 (Shootings by race)**

**query:**

select

case

when race='A' THEN 'Asian'

when race='B' THEN 'Black'

when race='W' THEN 'White'

when race='N' then 'Native'

when race='H' then 'Hispanic'

when race='O' then 'Unknown'

else 'Unknown'

end as race\_groups,

count(id) as CY\_shootings

from police\_shootings

where year(date)='2022'

group by

case

when race='A' THEN 'Asian'

when race='B' THEN 'Black'

when race='W' THEN 'White'

when race='N' then 'Native'

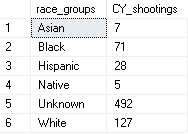
when race='H' then 'Hispanic'

when race='O' then 'Unknown'

else 'Unknown'

end;

**results:**



**Graph number 9 (Shootings by gender)**

**query:**

SELECT

CAST(COUNT(id) \* 100.0 / SUM(COUNT(id)) OVER () AS DECIMAL(10, 2)) AS Percentage,

COALESCE(gender, 'Unknown') AS Gender

FROM

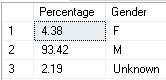
police\_shootings

where year(date) = '2022'

GROUP BY

COALESCE(gender, 'Unknown');

**results:**



**Graph number 10 (Shootings by signs of mental ilness)**

**query:**

SELECT

CAST(COUNT(id) \* 100.0 / SUM(COUNT(id)) OVER () AS DECIMAL(10, 2)) AS Percentage,

CASE WHEN signs\_of\_mental\_illness IS NULL THEN 'Unknown' ELSE signs\_of\_mental\_illness END AS Signs\_of\_Mental\_Illness

FROM

police\_shootings

where year(date)='2022'

GROUP BY

signs\_of\_mental\_illness;

**results:**



**Graph number 11 (Total shootings by state top 10)**

**query:**

select top 10 state,count(id) as CY\_shootings from police\_shootings

group by state

order by CY\_shootings DESC

**results:**

