## Task for the sheet 'Population'

The data contains Population by ethnicity, age and gender for the country of Malaysia from the year 1957 to 2018.

1. Identify the largest Ethnic group in Malaysia. Their average population growth over the years and what proportion of the total population do they constitute.

select sum(population), ethnicity from world.population2 group by ethnicity order by population desc

## Largest ethnic group is "Chinese"

select birthyear,sum(population),lag(sum(population)) over (order by birthyear) as Previous\_year\_data,

(((sum(population) - lag(sum(population)) over (order by birthyear))/lag(sum(population)) over (order by birthyear)) \* 100) as GrowthRate

from world.population2

where ethnicity='Total Chinese'

group by birthyear

order by birthyear

## On average the Chinese constitute 75% of Total Population

2. Identify the largest age group in Malaysia. Their average population growth over the years and what proportion of the total population do they constitute.

## Largest Age group = 5 - 9 Years

select birthyear, sum(population), lag(sum(population)) over (order by birthyear) as Previous\_year\_data,

(((sum(population) - lag(sum(population)) over (order by birthyear))/lag(sum(population)) over (order by birthyear)) \* 100) as GrowthRate

from world.population2

where age = '5 - 9 Years' and ethnicity='Total Residents'

group by birthyear

order by birthyear

On average the Age Group (5-9) constitute 8.68% of Total Population

3. Identify the group (by age, ethnicity and gender) that:

select birthyear, sum(population), lag(sum(population)) over (order by birthyear) as Previous\_year\_data, (((sum(population) - lag(sum(population)) over (order by birthyear))/lag(sum(population)) over (order by birthyear)) \* 100) as GrowthRate from world.population2 where age = 'Required Age Group' and ethnicity='Required Ethnicity' group by birthyear order by birthyear

a. Has shown the highest growth rate

From the graph its evident that Age group "70+", Ethnicity "Other minor groups", Gender "Female" has highest growth rate

b. Has shown the lowest growth rate

From the graph its evident that Age group "0-4", Ethnicity "Malays", Gender "Male" has lowest growth rate

Also the growth rate of senior citizens is on a steady raise after the year 1990 and the age group "0-4" is on a steady decline after 1985