Outline –

- I used SQL to extract annual average temperature for Singapore and global, respectively. Please see chart 1, 2
- Used excel to open both csv files and calculate the 5-year moving average temperature for Singapore and global, respectively. Please see chart 3
- Used excel to plot the five-year moving average temperature for Singapore and global, respectively. Please see chart 4, 5.
- Interpret results. Please see the observation section

Chart 1: use SQL to get average temperature in Singapore by year, and download that to a csv file

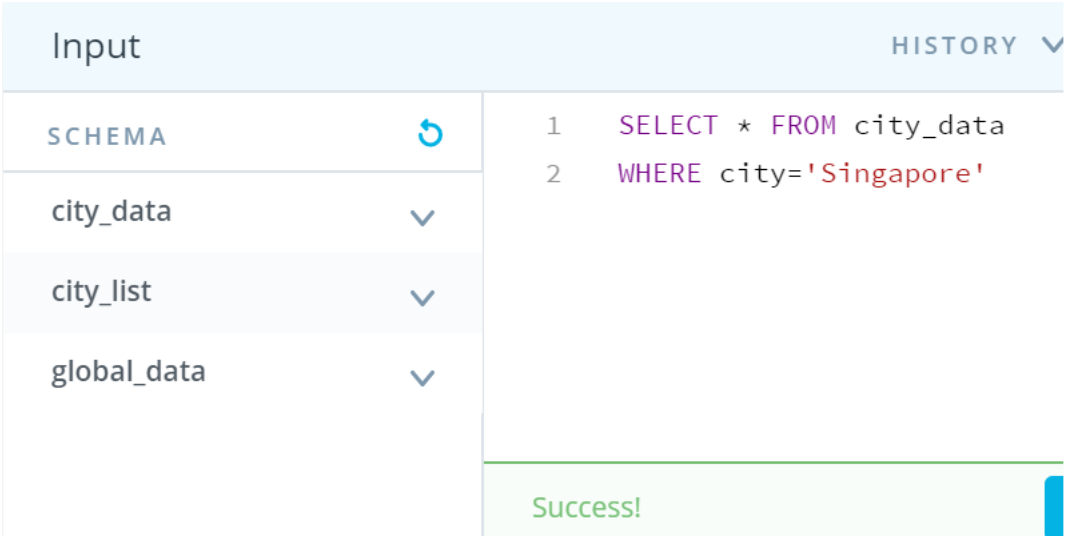


Chart 2: use SQL to get global average temperature by year, and download that into another csv file

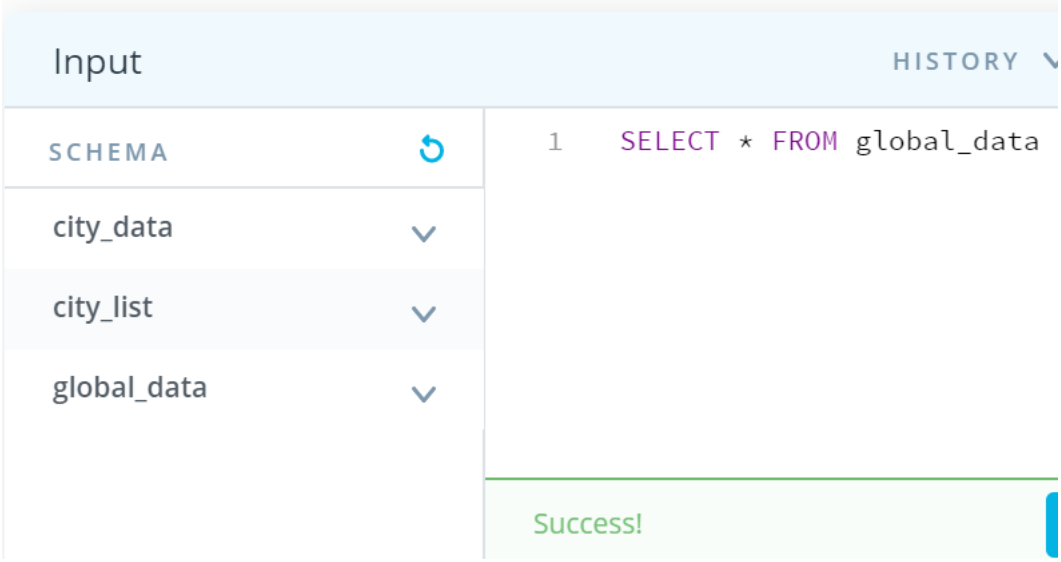


Chart 3: use excel embedded function to calculate moving average

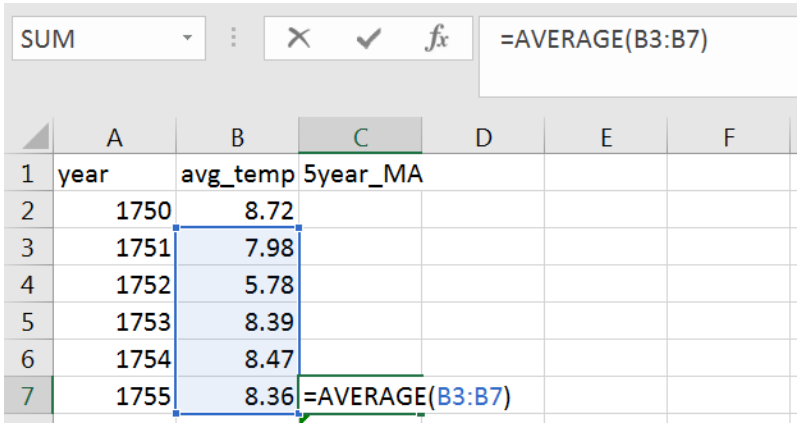
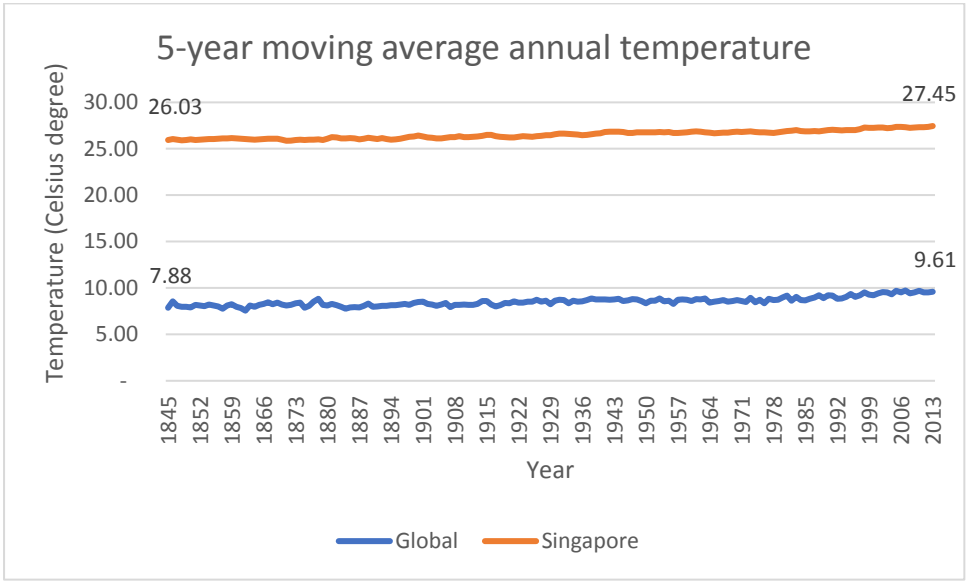
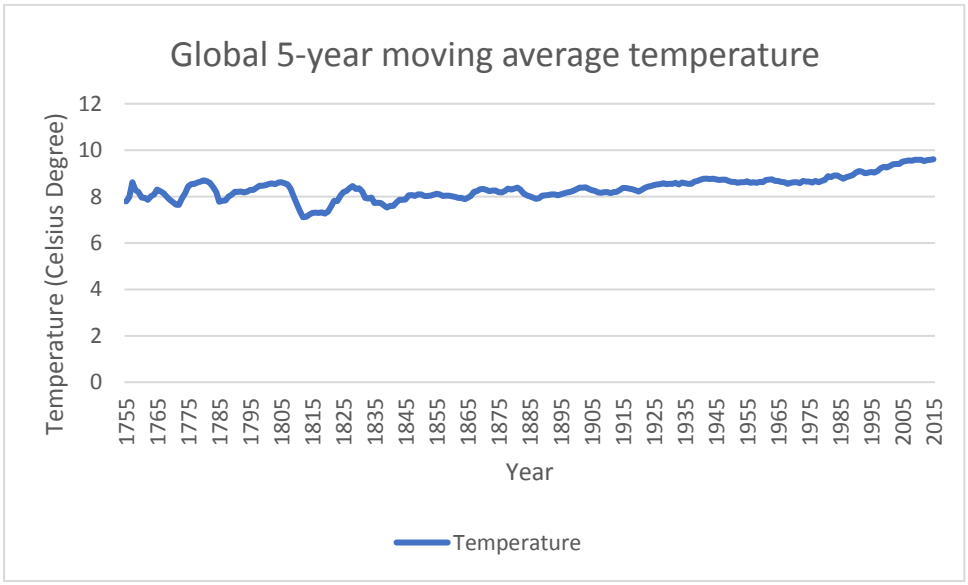


Chart 4: 5-year moving average temperature for Singapore and global





Observations

- Singapore have been consistently hotter than the rest of the world.
- Singapore and global average temperatures have both increased since 1845.
- On global average data, the overall trend has been on the rise, but there was a sharp correction in the early 1800.
- Specific to Singapore, its average temperature increase is smaller than global average – between 1845 and 2013, Singapore's average temperature increased by 1.42 Celsius, and global average increased by 1.73 Celsius.