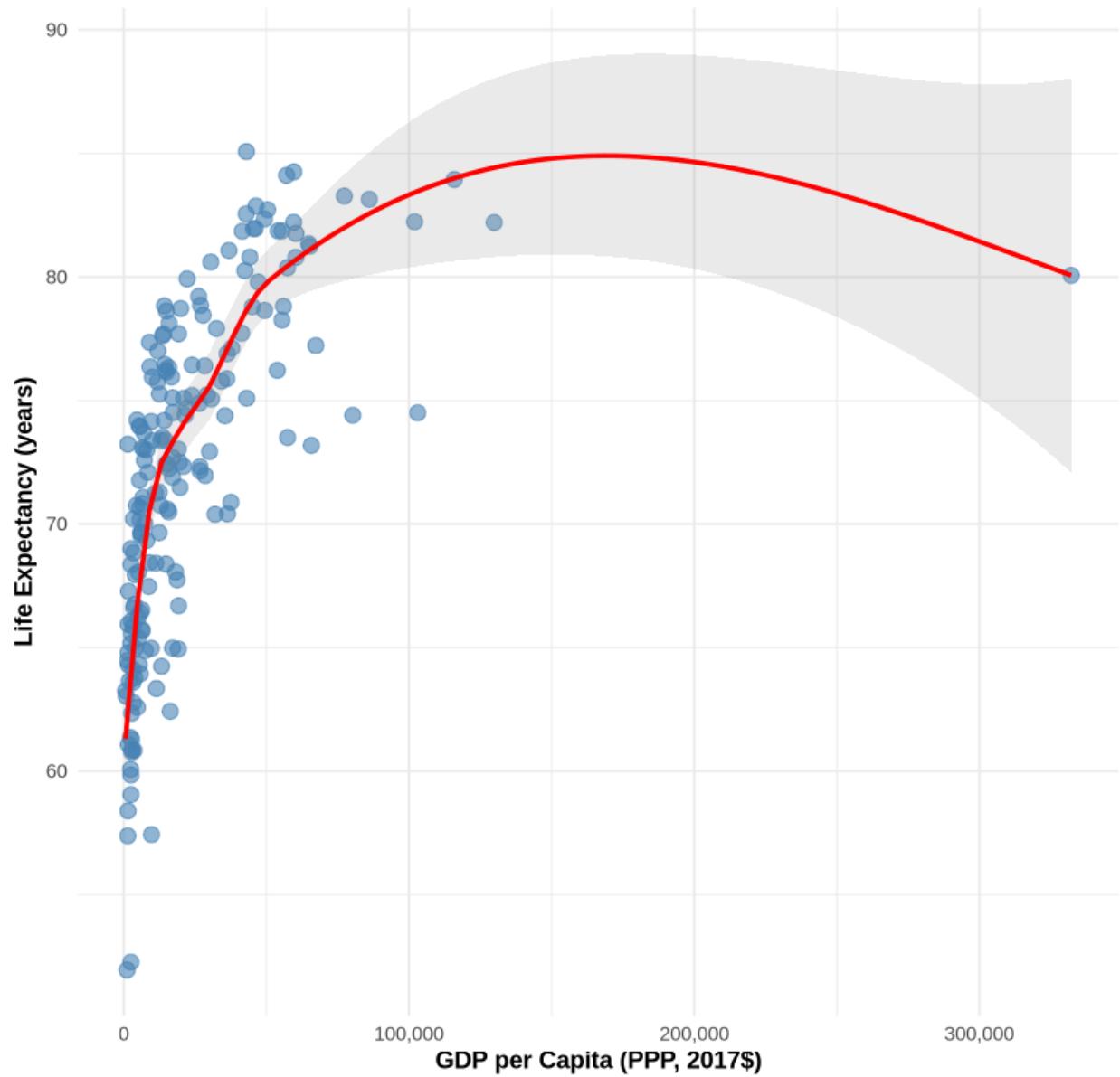
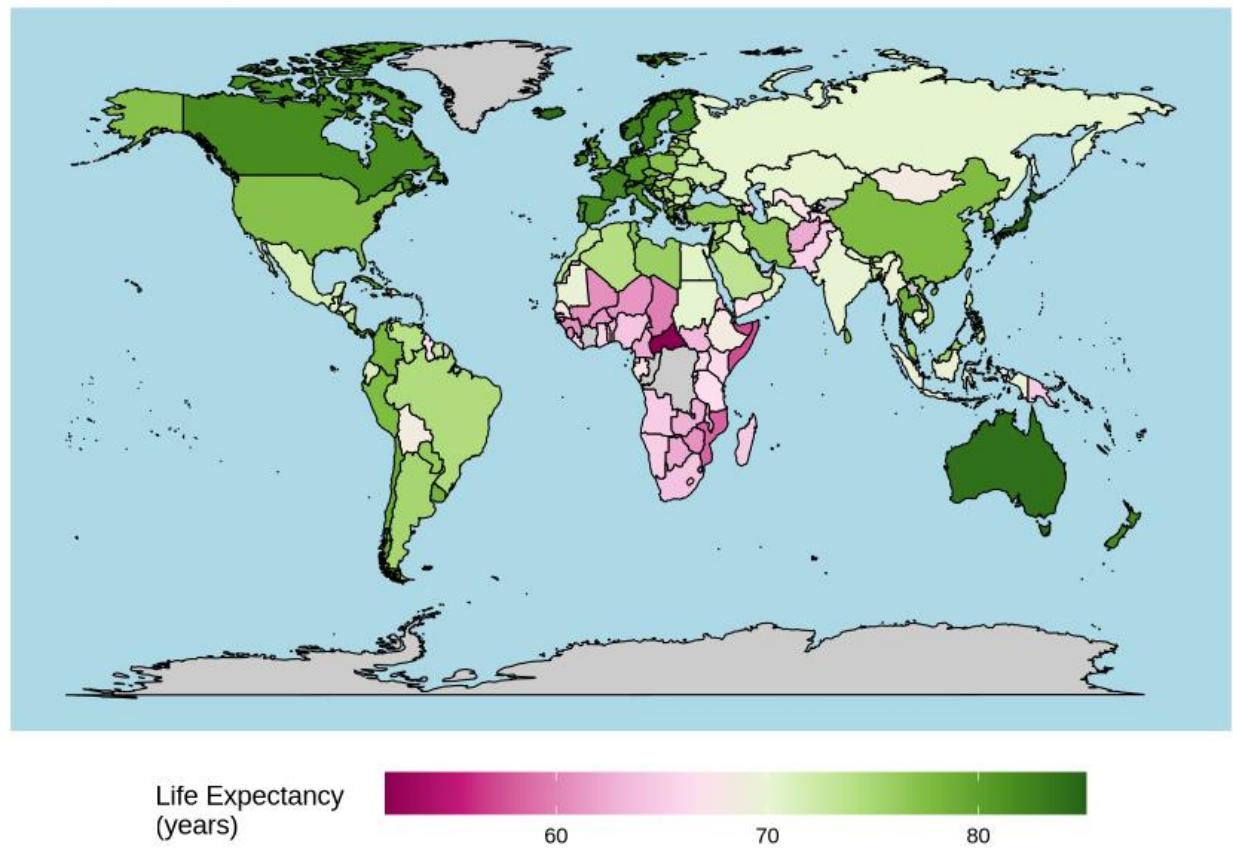


Relationship between GDP per Capita and Life Expectancy (2020)



Life Expectancy in 2020



Interpretation

The relationship between GDP per capita and life expectancy in 2020 shows a **moderate positive correlation** ($r = 0.554$). Key findings:

- **Non-linear relationship:** The scatterplot reveals a logarithmic pattern where life expectancy increases rapidly with GDP at lower income levels, but the gains diminish at higher GDP levels. This suggests that initial economic development has a strong impact on health outcomes, but beyond a certain threshold, additional wealth produces smaller improvements in longevity.

- **Diminishing returns:** Countries with GDP per capita below \$20,000 show the steepest improvements in life expectancy. Beyond this point, the curve flattens considerably, indicating that factors other than income (healthcare quality, lifestyle, social systems) become more important.
- **Wide variation:** There's considerable variation in life expectancy among countries with similar GDP levels, particularly in the middle-income range, suggesting that how wealth is distributed and invested in health infrastructure matters as much as absolute wealth.
- **Range:** Life expectancy ranges from 52 to 85 years, while GDP per capita varies dramatically from \$626 to \$332,202, showing much greater economic inequality than health outcome inequality globally.

REFLECTION.

- What was easy?

The step by step following of the provided **outline** had make the process of interacting with the AL tools Easy and smooth.

- What was Surprising?

Its surprising that you the timeline is less than expected.

- I learnt a better prompt and timely process of analyzing data.