GROUP 19: INDIA: Group Members: Taras Vorobets, Shail Shah, Parv Joshi

a) Calculate the steady-state level of income per capita for the US and for your country of choice.

Table.1: Data for the United States with Steady State underneath it

Averages of the Years for which data is available (US):	Values:
Savings Rate (s):	19.89
Population Growth Rate (n):	0.99
Depreciation Rate (d):	0.10
Technological Growth (g):	0.93
α:	0.30
1-α:	0.70
Steady state level of income per capita calculated from data above:	2.67

Table.2: Data for India with Steady State underneath it.

Averages of the Years for which data is available (India):	Values:
Savings Rate (s):	28.30
Population Growth Rate (n):	1.59
Depreciation Rate (d):	0.1
Technological Growth (g):	3.25
α:	0.3
1-α:	0.7
Steady state level of income per capita calculated from data above:	2.11

b) Given your result in (a), what is your forecast for the performance of each country in, say, the next ten to twenty years? That is, do you predict each country to continue growing at the same average rate? Faster? Slower? Explain briefly.

After calculating the data for both the United States and India we came to some expected results. In the case of the United States, it is a country which is past its peak in terms of growth rate as shown by the Solow model, we found the steady-state to be about 2.6% in terms of income per capita and 0.92% for technological growth. For India, a country which has gone through major reform starting in the 1990s, showed major technological growth coming in at around 3.3% and a steady level of income per capita at around 2.1%.

Regarding the United States as, the economy remains relatively steady over the past two decades, as represented by the steady-state, we predicted that in the next ten to twenty years the technological growth rate would continue to increase due to high amounts of innovation but the growth rate of output per capita would remain relatively the same in the short 20-year span.

For India, since we had data only stemming from 1990, we developed a different prediction. With such a fast-developing economy, it's clear that India hasn't reached the peak of its growth rate. Despite it showing a lower steady-state than the United States, we predict that India in ten to twenty years will reach an even higher growth rate as it approaches its peak for growth. Thanks to a rapidly developing technological sector, immense labor force, and economical restructuring, the country will experience an increase in all aspects of the economy including the level of income per capita.

c) In each country, given the last year for which you have data: how many years will it take for its income per capita to double?

To calculate this data we used the **RULE OF 72:**

$$Years \ to \ double \ = \frac{72}{Current \ Growth \ Rate \ (\%)}$$

We received the following results:

Growth Rate in the US in 2018:	2.93
Years to Double	24.60

Growth Rate in India in 2018:	6.98
Years to Double	10.31