Hello class, I’m going to model the population growth of Indian Trail, North Carolina. Indian Trail is a constantly growing city and is becoming bigger every day, whether if it’s building a new neighborhood or new apartments, or even restaurants. And in Indian Trail is a nice school system to go along with it. It was also named ‘United States Top Ten Best Places for Families’ in Family Circle Magazine. With the population increasing from, 19,500 in 2010, to 41,000 today it is growing at an alarming rate. We need to continue to grow and build our town so we can keep up with our progress, and we can do that by:

1. Creating more apartments and housing.
2. Creating more businesses and Job opportunities.
3. Continuing to support our education system.

I feel like this list is important because it has helped increase the city so far, so we need to continue this and continue to build, so we can increase our popularity and population.

Starting population a0 = 41,000

Next 10 years, n = 10

Common Difference will be d = 1,000

Algorithm =

a0 = 41,000 n = 1

While n < 10

a0 = 41,000 + (1,000 \* n)

n = n + 1

End While

Since I live in North Carolina there are multiple natural imbalances like “tornadoes, floods, hurricanes, lighting strikes, snow and ice storms”. North Carolina is vulnerable to most of these natural disasters because of it being on the coast. These natural disasters are dangerous and can cause damage to property, and mess up food and water resources and cause power outages.

About a year ago the area I live in was flooding badly due to heavy rain, which made it difficult to drive, and caused multiple roads to be closed, which made it difficult to navigate. Th town/state officials handle the flooding by closing the roads and sending out warnings for the flood to alert the people in certain areas the flood would affect.

I think everything was handled well enough, by warning and sending out alerts to indicate that a flood was happening and/or about to start. I remember working and people were gathering resources from the store and stocking up on supplies because they didn’t know how bad it would get. The CDC says that you should gather emergency supplies, listen to the news for updates, bring in your outdoor items so that they are secured, and stay away from areas that are known to flood.

I have compared my natural disaster to Patrick Harrington, since in West Virginia since he states their biggest issue is flooding. He says it would “flood properties and make it hard to travel” (*North Carolina Emergency Management*), which is very similar to the situation I was in while my area was flooding, and just like where I am they also warned their community about the storm up ahead. It seemed like they had to take more severe flooding than mine, or they were just at a high risk due to were he was located at the time of the storm.

I know for a fact that the weather for North Carolina can be weird and crazy at times, with it feeling like summer in winter and with temperatures being 40 one day and the next day 80, so climate change is real. With climate change it will most likely cause more droughts and increase the temperature, and more storms like hurricanes and tornadoes will occur more frequently.

*North Carolina Emergency Management*. North Carolina Hazards | Ready NC. (n.d.). Retrieved February 5, 2023, from https://www.readync.gov/stay-informed/north-carolina-hazards#:~:text=All%20parts%20of%20North%20Carolina,to%20food%20and%20water%20supplies.

Centers for Disease Control and Prevention. (2022, September 23). *Flood safety tips*. Centers for Disease Control and Prevention. Retrieved February 5, 2023, from https://www.cdc.gov/nceh/features/flood-safety/index.html