1. Andy Shi (shixx771) and Frank Back (backx039)
2. The strategy that we used focuses on taking as many planets as possible early on and then give the planets some time to grow in size. Once the planets reach a certain size based on a percentage of their total population, They will start to move their populations between the all edges that they are near, making it so that growth is maximized and loss of growth is minimized. Once the planets that are next to the opponent’s planets start to hit a certain size (usually indicating the other planets hitting a certain size and beginning to share their populations), the full on attack of sending most of the population toward the opponent planets. This will still be countered by the other planets sending each other part of their populations, because the shuttles that are already on their way will arrive, filling the planet up to around its original population
3. The structures used in our strategy are Stacks, Lists, and Dictionaries. A stack is used for visible planets because it will only be used once to create the map(dictionary) which contains the planet IDs and planets as the keys and the values for all the planets. Since it is only used once, popping the stack won’t affect it possibly being used later. Lists are split up the planets into 2 sections: self and other. This allows the two categories to be referenced separately when we implement our strategy. Finally, a dictionary is used to contain all the planets with their IDs as the keys and the values as the planets so that we can specifically pick out the planets that we want. This helps with getting the edge planets of all the planets.
4. N/A
5. N/A
6. An issue with our strategy is that it relies on getting planets early on and then defending those planets through their growth rates until they reach a certain size. If we don’t get enough planets early on, the strategy is unsuccessful. Also, during the expansion phase, some of the planets send their entire population to a different planet; however, this allows for quicker expansion, and is countered by the other planets sending in more population when the planet becomes neutral.