- 1. If I were an Airbnb software engineer, I would create a system that could connect to the city's registration database to validate policy numbers. Thus, it would be efficient to allow people to check the Airbnb policy number quickly. In addition, add in a program that checks the format of the policy number. Either numbers start with STR, are dashed with four zeros, or end in STR. It should automatically flag numbers that look suspicious and need to be further investigated. One reason to argue against adopting the system is that the city government won't allow sharing this data with the public. It would be seen as leaking private information that violates the privacy law. The second reason is that systems aren't built to process large amounts of data. There will be people trying to mask the policy number format that could end up not being able to check its validity from the city government because the data was released to the public.
- 2. Skim through the Housing Insecurity in the US Wikipedia page. One research question that the data could answer is how income impacts the number of bedrooms people can afford to rent. Looking through the data graph of one-bedroom rent by state Almost all state rental prices have increased over the years. In some places, the rental prices were overly high compared to others based on geographic location. This statistic revealed that many people are affected by the affordability of housing based on price increases that have consumed their income to rent more than one bedroom. Furthermore, many people renting a one-bedroom apartment are single people looking for a place to live.
- 3. One factor I think is important to consider when it comes to the legality of web scraping is copyright infringement. There are still a lot of gray areas about what is legal or illegal when scraping a website. The US law has not cleared up enforcement, and judges are ruling cases based on various criteria. For one, more and more people found ways to scrape data and use it without its website's acknowledgment. Because there is no consent in the situation, it is debatable whether these data can be legally used. Secondly, private information is a big factor to consider as well. When a website's information was being scraped too deeply, it crossed the line of privacy violation. Many companies are against scraping websites because people don't know when to stop. If private information were leaked from the company due to scraping, the company would essentially be in trouble and lose huge amounts of money because of that. That is the same as a hacker.
- 4. One guideline to consider would be to look at how private the information is. If the data contains contact information, a name, an address, or a social security number, Then using and posting the data would be a violation of one's private information. Thus, the entire case is not about violating the company's terms; it would violate autonomy and confidentiality. The second guideline to think about is consensus. When it comes to other personal information, consent is the number

one rule everyone should obtain before proceeding. We should think twice about whether the public data was collected with consent or simply without acknowledgement. The battle over privacy versus public information will be the next big thing when technology gets more and more advanced. Online security should be on Outlook to draw lines on how much people can scrape before digging too deep.