Background and Approach
Our datasets contained a combination of numerical and categorical data. Our sample population of 564, was asked 26 questions, with 29 different response variables. We were interested in how respondents' behaviors were impacted or not impacted by the lockdown across generational groups. We added one more variable, age group, by breaking down the data by age to help us better understand the data and the outcomes overall. The tools we used to clean and analyze include: Excel, R, SAS and graphs in Prezi. Of our 564 respondents, 189 (33.51%) were males, so females were the largest gender group in the sample population representing (65.25%). Gen X and millennials were approximately the same male to female ratio, with Gen X slightly above by percent. "Non binary" gender answers were concentrated mostly within the Gen Z group. No other generational groups before them had this subset. All generational groups were approximately equally represented in the sample. Females were most represented in Gen Z through Gen X but then the ratio was offset within the boomers age group with males making up over fifty percent. What this means for our data is that there are considerations like stay home moms career types that can influence the data and the habits being studied.

Commuting and Transportation habits
We notice that pre-pandemic, over 50% of respondents in each age group preferred to commute by driving, public transportation came in second, only 5.5% of respondents tele worked before lockdown. Post lockdown, we notice that about 77% of respondents stopped commuting to work on a regular basis. The remaining 23% continued regular commutes, and of those, only 2% changed their commuting mode. This shows that transportation mode was not terribly impacted by the pandemic. With this observation, we recommend that the government and law makers maintain current transportation infrastructure but actively focus on investing in and expanding on technology that supports telecommuting for the foreseeable future such as cybersecurity.

Online grocery shopping habits
More than 50% of millennials did grocery shopping online during the lockdown. 40% of Gen Z's and Gen X patronize online grocery shopping, while baby boomers surprisingly follow closely at about 38% during the lockdown. Combined, only 45% of respondents shopped online during the lockdown and 53% of people tried it. We deduce that shopping for groceries online specifically is still not widely adopted, even across generational groups as much as we would expect, especially during the lockdown. Despite health and covid concerns, people still preferred to do in person groceries over online grocery shopping. We see that millennials are most likely to continue this habit post pandemic. Boomers still prefer traditional grocery shopping which is not surprising. However, our research shows that once more people try online grocery shopping, they are likely to keep it up post lockdown. Because from our analysis 73% of respondents who tried online grocery shopping plan to continue this habit. However, for those who have never tried online grocery shopping, they are less likely to adopt it post lockdown. There are more people in generational groups who have not tried online grocery shopping. Gene Zers shows a promising adoption of online grocery shopping pre and post lockdown.

Hypothesis Tested

1.People above 60 increased online shopping during the lockdown compared to those 40 and under.
    → False, boomers did little bit of shopping compared to the other age groups.
2.There was no significant change in online shopping habits among people 40 and below.
    → False, no significant change.
3.People 50+ have reduced commutes.
    → True, most of Gen X switch to telecommuting.