Part 2 of Analysis

Phase 2 Data Only

1. Rate of Children Removed From Their Homes By Race
2. Rate of Children Removed From Their Homes By Sexual Orientation
3. Percentage On An IEP while In School By Race
4. Percentage Suspended While In School By Race
5. Percentage Expelled While In School By Race
6. Percentage Arrested Under The Age of 18 By Race
7. Percentage Experiencing a School Based Arrest By Race
8. Percentage Experiencing a School Based Arrest By Gender

In [529…

```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np
import seaborn as sns
sns.set()
```

In [530…

```
phase2 = pd.read_csv('phase2_checkbox_data.csv')
```

In [531…

```
phase2.head()
```

Out[531…

	PDF Name	1	2	8	9	10	11	18	19	20	...	62.1
0	1-2.pdf	State Prison	Sentenced	Latinx	Female	No	Bisexual	Yes	Yes	Parent	...	Yes
1	1-3.pdf	State Prison	Sentenced	Black/African American	Female	No	Straight (Heterosexual)	No	Prefer not to answer	NaN	...	NaN
2	1-4.pdf	State Prison	Sentenced	White	Female	No	Straight (Heterosexual)	No	No	Parent, Other family member, Teacher/coach, Ot...	...	No
3	1-5.pdf	State Prison	Sentenced	Latinx	Female, Prefer to self-describe:	No	Straight (Heterosexual)	No	No	Parent, Other family member	...	No
4	1-6.pdf	State Prison	Sentenced	White	Female	No	Lesbian	No	No	Other family member	...	No

5 rows × 78 columns

In [532…

```
phase2['8'] = phase2['8'].replace(['Latinx, Prefer to self-describe:','White, Multi-Race',
                                   'White, Native Hawaiian/Pacific Islander','Black/Africa
                                  'Black/African American, White, Multi-Race','White, Lati
                                  'Black/African American, Latinx'],
                                  'Multi-Race')
```

In [533…

```
phase2['11'] = phase2['11'].replace('Bisexual, Prefer to self-describe:', 'Prefer to self-
```

1. Rate of Children Removed From Their Homes By Race

In [534…

```
phase2['29'] = phase2['29'].replace(['No -  I was not removed from my home by DCF/DSS.','N
                                     'No - I was not removed from my home by DCF/DSS.'],
```

Rate of African Americans Removed From Their Home

In [535…

```
removed_african_american = phase2[phase2['8'] == 'Black/African American'].groupby('29').s
removed_african_american = (removed_african_american / removed_african_american.sum()) *10
print('Removed From Home - African American',removed_african_american)
```

```
Removed From Home - African American 29
No     67.5
Yes    32.5
dtype: float64
```

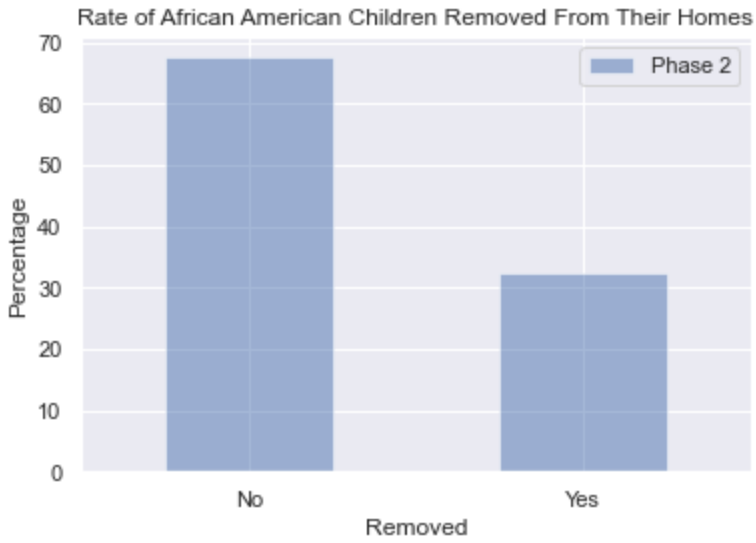
In [536…

```
removed_african_american_count = phase2[phase2['8'] == 'Black/African American'].groupby('
print('Removed From Home - African American',removed_african_american_count)
```

```
Removed From Home - African American 29
No     27
Yes    13
dtype: int64
```

In [537…

```
removed_african_american.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of African American Children Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of White People Removed From Their Home

In [538…

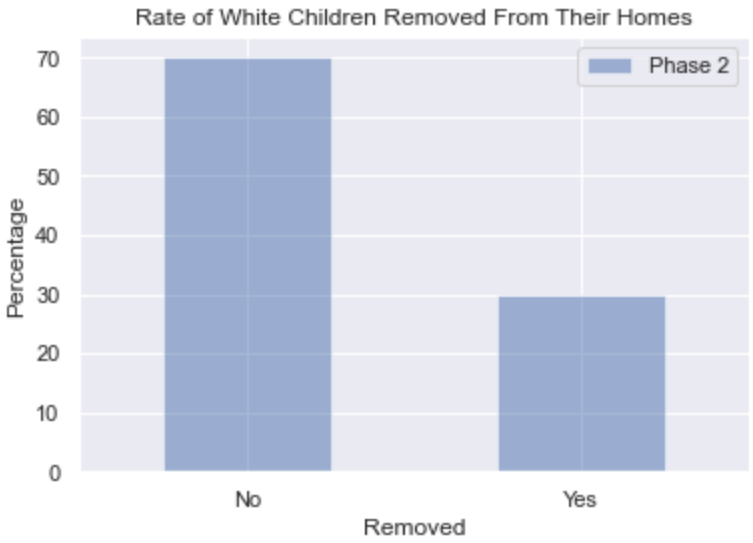
```
removed_white = phase2[phase2['8'] == 'White'].groupby('29').size()
removed_white = (removed_white / removed_white.sum()) *100
print('Removed From Home - White',removed_white)
```

```
Removed From Home - White 29
No     70.0
Yes    30.0
dtype: float64
```

In [539…
```
removed_white_count = phase2[phase2['8'] == 'White'].groupby('29').size()
print('Removed From Home - White',removed_white_count)
```

```
Removed From Home - White 29
No     42
Yes    18
dtype: int64
```

In [540…
```
removed_white.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of White Children Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of Asian People Removed From Their Home

In [541…
```
removed_asian = phase2[phase2['8'] == 'Asian'].groupby('29').size()
removed_asian = (removed_asian / removed_asian.sum()) *100
print('Removed From Home - Asian',removed_asian)
```

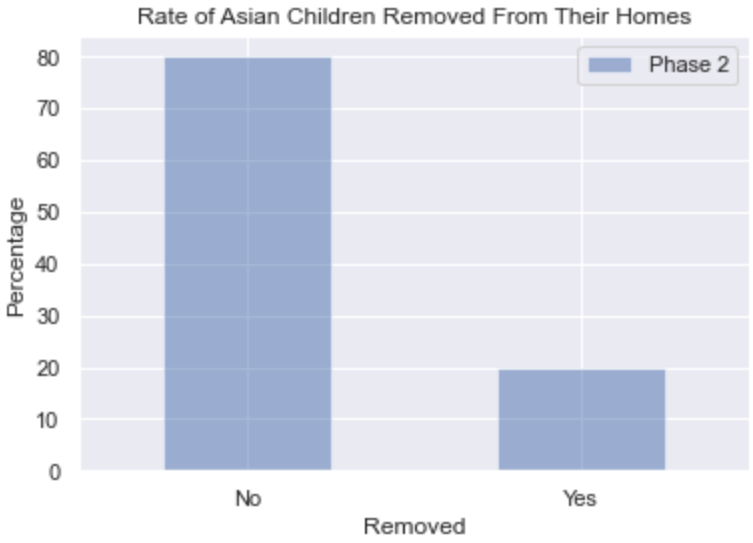
```
Removed From Home - Asian 29
No     80.0
Yes    20.0
dtype: float64
```

In [542…
```
removed_asian_count = phase2[phase2['8'] == 'Asian'].groupby('29').size()
print('Removed From Home - Asian',removed_asian_count)
```

```
Removed From Home - Asian 29
No     4
Yes    1
dtype: int64
```

In [543…
```
removed_asian.plot(kind='bar', legend=True, alpha=.5)
```

```
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of Asian Children Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of Latinx People Removed From Their Home

In [544…

```
removed_latinx = phase2[phase2['8'] == 'Latinx'].groupby('29').size()
removed_latinx = (removed_latinx / removed_latinx.sum()) *100
print('Removed From Home - Latinx',removed_latinx)
```

```
Removed From Home - Latinx 29
No     87.5
Yes    12.5
dtype: float64
```

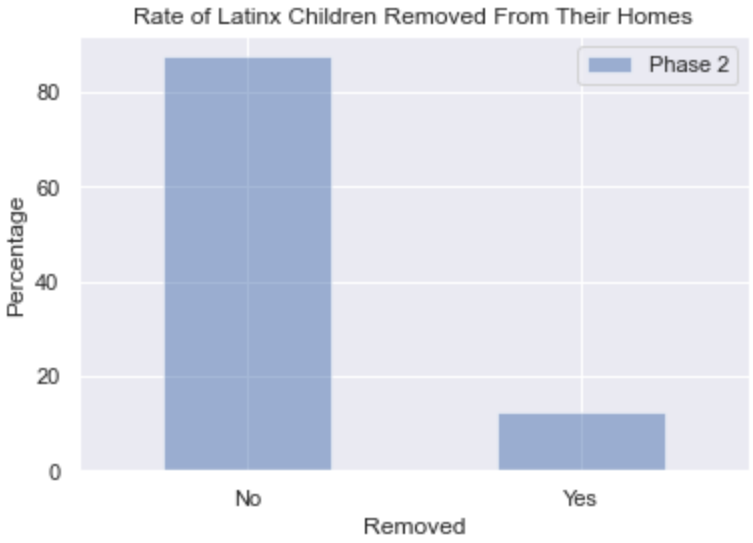
In [545…

```
removed_latinx_count = phase2[phase2['8'] == 'Latinx'].groupby('29').size()
print('Removed From Home - Latinx',removed_latinx_count)
```

```
Removed From Home - Latinx 29
No     7
Yes    1
dtype: int64
```

In [546…

```
removed_latinx.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of Latinx Children Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of Native American People Removed From Their Home

In [547…

```
removed_native = phase2[phase2['8'] == 'Native American'].groupby('29').size()
removed_native = (removed_native / removed_native.sum()) *100
print('Removed From Home - Native American',removed_native)
```

```
Removed From Home - Native American 29
No     50.0
Yes    50.0
dtype: float64
```

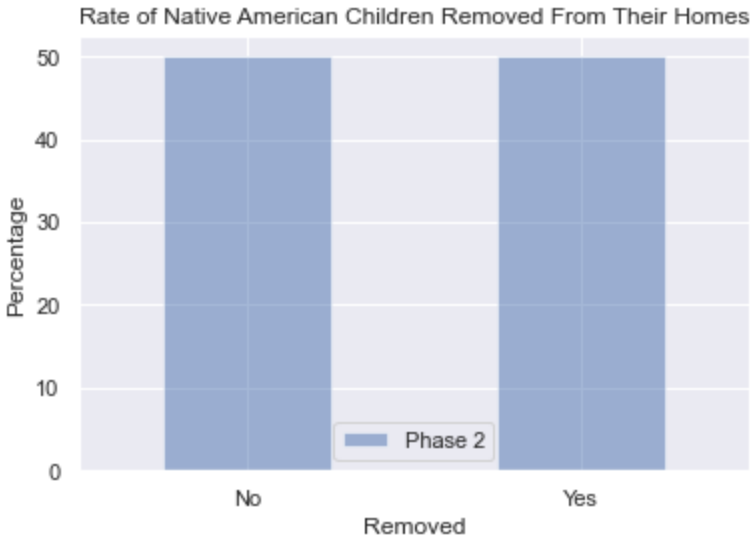
In [548…

```
removed_native_count = phase2[phase2['8'] == 'Native American'].groupby('29').size()
print('Removed From Home - Native American',removed_native_count)
```

```
Removed From Home - Native American 29
No     2
Yes    2
dtype: int64
```

In [549…

```
removed_native.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of Native American Children Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of Multi Racial People Removed From Their Home

In [550…

```
removed_multi = phase2[phase2['8'] == 'Multi-Race'].groupby('29').size()
removed_multi = (removed_multi / removed_multi.sum()) *100
print('Removed From Home - Multi Race',removed_multi)
```

```
Removed From Home - Multi Race 29
No     46.666667
Yes    53.333333
dtype: float64
```

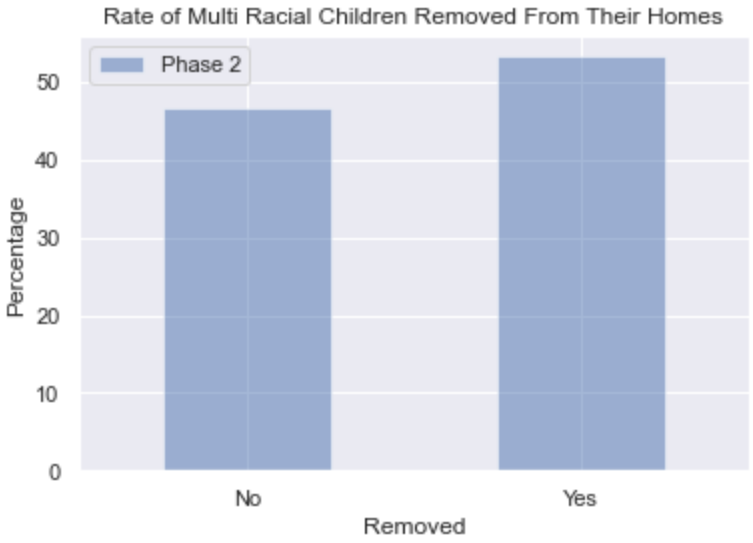
In [551…

```
removed_multi_count = phase2[phase2['8'] == 'Multi-Race'].groupby('29').size()
print('Removed From Home - Multi Race',removed_multi_count)
```

```
Removed From Home - Multi Race 29
No     7
Yes    8
dtype: int64
```

In [552…

```
removed_multi.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of Multi Racial Children Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of People Who Prefer To Self Describe Removed From Their Home

In [553…

```
removed_self = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('29').size()
removed_self = (removed_self / removed_self.sum()) *100
print('Removed From Home - Prefer to self-describe',removed_self)
```

```
Removed From Home - Prefer to self-describe 29
No     66.666667
Yes    33.333333
dtype: float64
```

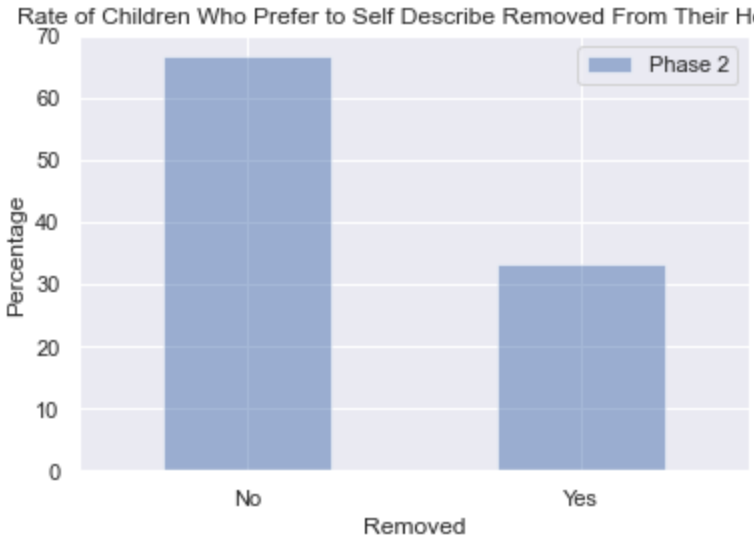
In [554…

```
removed_self_count = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('29').size
print('Removed From Home - Prefer to self-describe',removed_self_count)
```

```
Removed From Home - Prefer to self-describe 29
No     8
Yes    4
dtype: int64
```

In [555…

```
removed_self.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of Children Who Prefer to Self Describe Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Children Removed From Homes By Race

In [556…

```
# Phase 2
removed_by_race = phase2[phase2['29'] == 'Yes'].groupby('8').size()
removed_by_race = (removed_by_race / removed_by_race.sum()) *100
print('Children Removed from Homes by Race',removed_by_race)
```

```
Children Removed from Homes by Race 8
Asian                          2.127660
Black/African American        27.659574
Latinx                         2.127660
Multi-Race                    17.021277
Native American                4.255319
Prefer to self-describe:       8.510638
White                         38.297872
dtype: float64
```

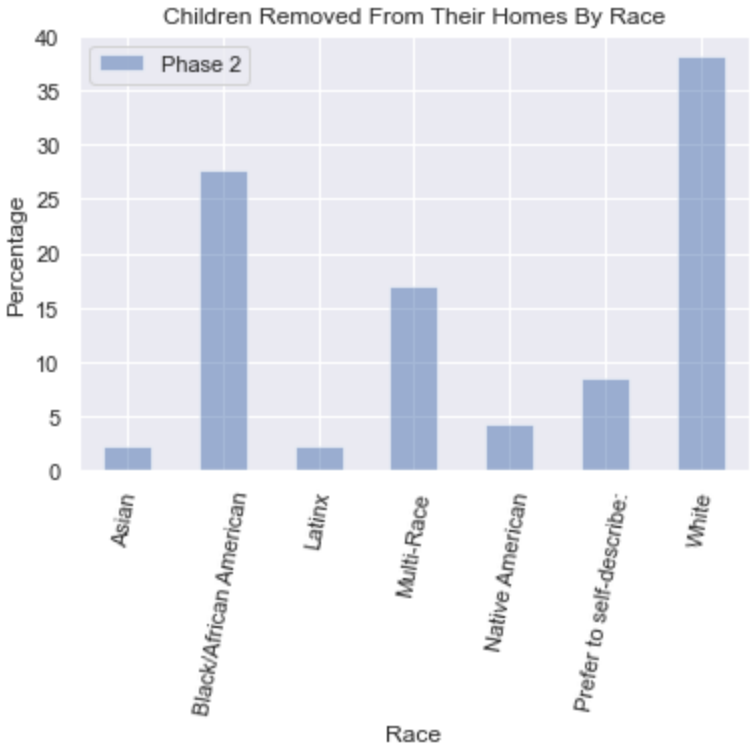
In [557…

```
removed_by_race_count = phase2[phase2['29'] == 'Yes'].groupby('8').size()
print('Children Removed from Homes by Race',removed_by_race_count)
```

```
Children Removed from Homes by Race 8
Asian                          1
Black/African American        13
Latinx                         1
Multi-Race                     8
Native American                2
Prefer to self-describe:       4
White                         18
dtype: int64
```

In [558…

```
removed_by_race.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Race')
plt.ylabel('Percentage')
plt.title('Children Removed From Their Homes By Race')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 80)
plt.show()
```



2. Rate of Children Removed From Their Homes By Sexual Orientation

In [559…
```
phase2['11'].value_counts()
```

Out[559…
```
Straight (Heterosexual)     134
Bisexual                     30
Lesbian                       9
Gay                           5
Prefer to self-describe:      5
Asexual                       1
Name: 11, dtype: int64
```

Rate of Straight People Removed From Their Home

In [560…
```
removed_straight = phase2[phase2['11'] == 'Straight (Heterosexual)'].groupby('29').size()
removed_straight = (removed_straight / removed_straight.sum()) *100
print('Removed From Home - Straight',removed_straight)
```

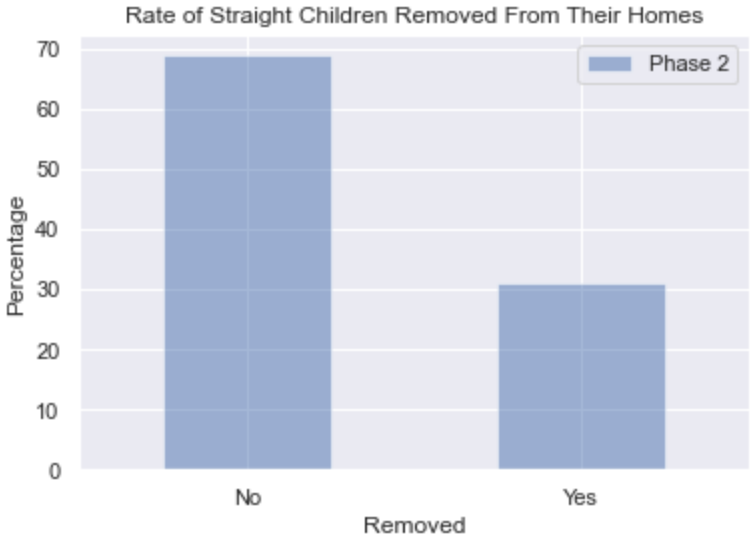
```
Removed From Home - Straight 29
No     68.867925
Yes    31.132075
dtype: float64
```

In [561…
```
removed_straight_count = phase2[phase2['11'] == 'Straight (Heterosexual)'].groupby('29').s
print('Removed From Home - Straight',removed_straight_count)
```

```
Removed From Home - Straight 29
No     73
Yes    33
dtype: int64
```

In [562…
```
removed_straight.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of Straight Children Removed From Their Homes')
```

```
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of Bisexual People Removed From Their Home

In [563…

```
removed_bisexual = phase2[phase2['11'] == 'Bisexual'].groupby('29').size()
removed_bisexual = (removed_bisexual / removed_bisexual.sum()) *100
print('Removed From Home - Bisexual',removed_bisexual)
```

```
Removed From Home - Bisexual 29
No     70.37037
Yes    29.62963
dtype: float64
```

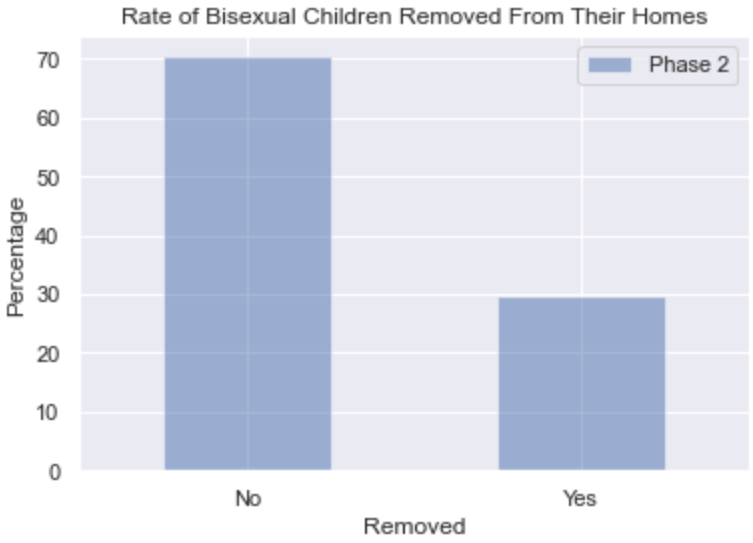
In [564…

```
removed_bisexual_count = phase2[phase2['11'] == 'Bisexual'].groupby('29').size()
print('Removed From Home - Bisexual',removed_bisexual_count)
```

```
Removed From Home - Bisexual 29
No     19
Yes     8
dtype: int64
```

In [565…

```
removed_bisexual.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of Bisexual Children Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of Lesbian People Removed From Their Home

In [566…

```
removed_lesbian = phase2[phase2['11'] == 'Lesbian'].groupby('29').size()
removed_lesbian = (removed_lesbian / removed_lesbian.sum()) *100
print('Removed From Home - Lesbian',removed_lesbian)
```

```
Removed From Home - Lesbian 29
No     33.333333
Yes    66.666667
dtype: float64
```

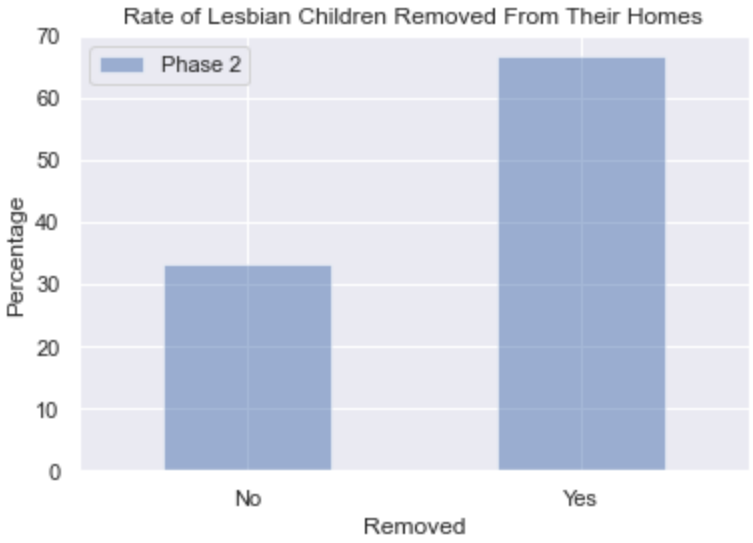
In [567…

```
removed_lesbian_count = phase2[phase2['11'] == 'Lesbian'].groupby('29').size()
print('Removed From Home - Lesbian',removed_lesbian_count)
```

```
Removed From Home - Lesbian 29
No     2
Yes    4
dtype: int64
```

In [568…

```
removed_lesbian.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of Lesbian Children Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of Gay People Removed From Their Home

In [569…

```
removed_gay = phase2[phase2['11'] == 'Gay'].groupby('29').size()
removed_gay = (removed_gay / removed_gay.sum()) *100
print('Removed From Home - Gay',removed_gay)
```

```
Removed From Home - Gay 29
No     75.0
Yes    25.0
dtype: float64
```

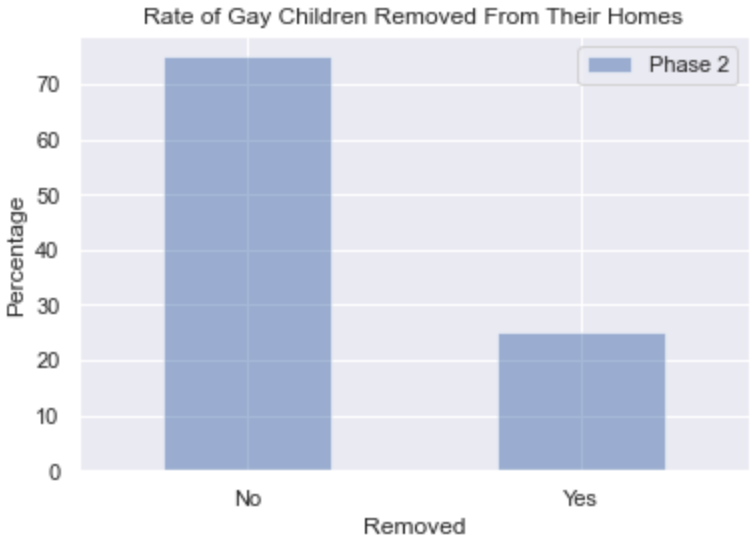
In [570…

```
removed_gay_count = phase2[phase2['11'] == 'Gay'].groupby('29').size()
print('Removed From Home - Gay',removed_gay_count)
```

```
Removed From Home - Gay 29
No     3
Yes    1
dtype: int64
```

In [571…

```
removed_gay.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of Gay Children Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of Asexual People Removed From Their Home

No Asexual people were removed from their homes, therefore the rate is 0%.

In [572…

```
removed_asexual = phase2[phase2['11'] == 'Asexual'].groupby('29').size()
removed_asexual = (removed_asexual / removed_asexual.sum()) *100
print('Removed From Home - Asexual',removed_asexual)
```

```
Removed From Home - Asexual Series([], dtype: float64)
```

In [573…

```
removed_asexual_count = phase2[phase2['11'] == 'Asexual'].groupby('29').size()
print('Removed From Home - Asexual',removed_asexual_count)
```

```
Removed From Home - Asexual Series([], dtype: int64)
```

Rate of People Who Prefer To Self Describe Removed From Their Home

In [574…

```
removed_self = phase2[phase2['11'] == 'Prefer to self-describe:'].groupby('29').size()
removed_self = (removed_self / removed_self.sum()) *100
print('Removed From Home - Prefer to self-describe',removed_self)
```

```
Removed From Home - Prefer to self-describe 29
No     40.0
Yes    60.0
dtype: float64
```

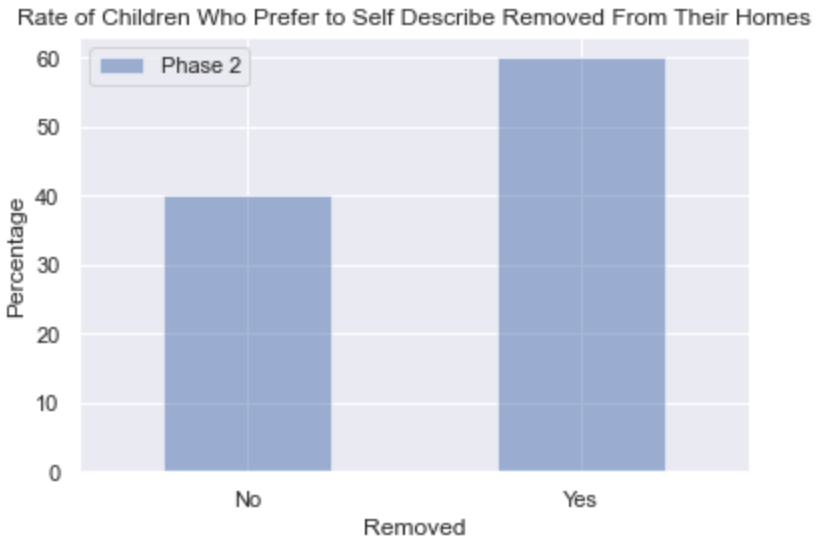
In [575…

```
removed_self_count = phase2[phase2['11'] == 'Prefer to self-describe:'].groupby('29').size
print('Removed From Home - Prefer to self-describe',removed_self_count)
```

```
Removed From Home - Prefer to self-describe 29
No     2
Yes    3
dtype: int64
```

In [576…

```
removed_self.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of Children Who Prefer to Self Describe Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Rate of LGBTQ People Removed From Their Home

In [577…
```
phase2['Sexual Orientation'] = phase2['11'].replace(['Bisexual','Lesbian','Gay'],'LGBTQ')
```

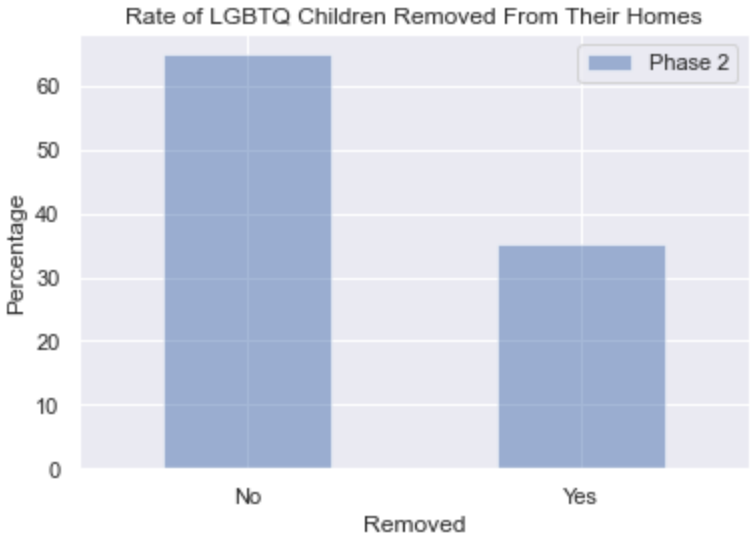
In [578…
```
removed_lgbtq = phase2[phase2['Sexual Orientation'] == 'LGBTQ'].groupby('29').size()
removed_lgbtq = (removed_lgbtq / removed_lgbtq.sum()) *100
print('Removed From Home - LGBTQ',removed_lgbtq)
```

```
Removed From Home - LGBTQ 29
No     64.864865
Yes    35.135135
dtype: float64
```

In [579…
```
removed_lgbtq_count = phase2[phase2['Sexual Orientation'] == 'LGBTQ'].groupby('29').size()
print('Removed From Home - LGBTQ',removed_lgbtq_count)
```

```
Removed From Home - LGBTQ 29
No     24
Yes    13
dtype: int64
```

In [580…
```
removed_lgbtq.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Removed')
plt.ylabel('Percentage')
plt.title('Rate of LGBTQ Children Removed From Their Homes')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Children Removed From Homes By Sexual Orientation

In [581…

```
# Phase 2
removed_by_sex = phase2[phase2['29'] == 'Yes'].groupby('11').size()
removed_by_sex = (removed_by_sex / removed_by_sex.sum()) *100
print('Children Removed from Homes by Sexual Orientation',removed_by_sex)
```

```
Children Removed from Homes by Sexual Orientation 11
Bisexual                     16.326531
Gay                           2.040816
Lesbian                       8.163265
Prefer to self-describe:      6.122449
Straight (Heterosexual)      67.346939
dtype: float64
```

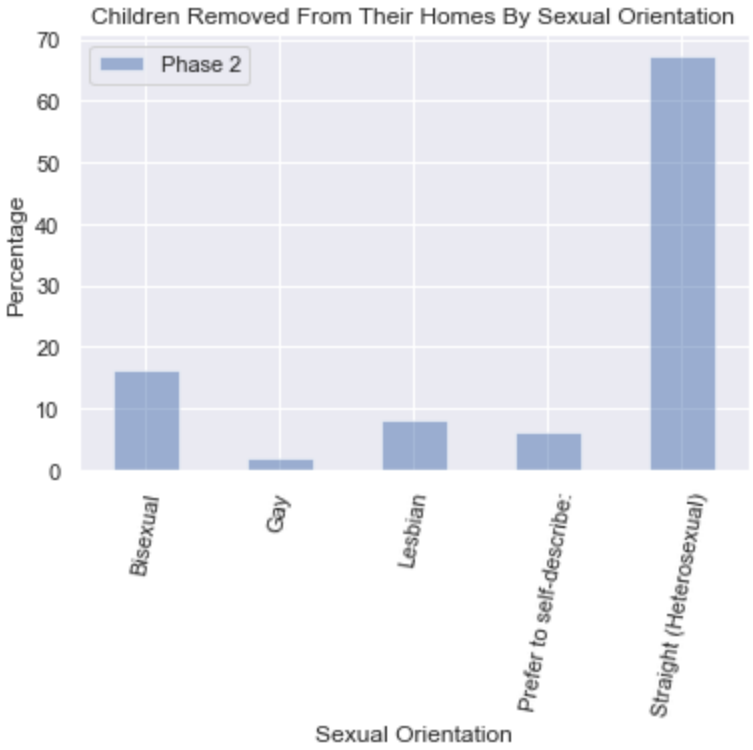
In [582…

```
removed_by_sex_count = phase2[phase2['29'] == 'Yes'].groupby('11').size()
print('Count of Children Removed from Homes by Sexual Orientation',removed_by_sex_count)
```

```
Count of Children Removed from Homes by Sexual Orientation 11
Bisexual                     8
Gay                          1
Lesbian                      4
Prefer to self-describe:     3
Straight (Heterosexual)     33
dtype: int64
```

In [583…

```
removed_by_sex.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Sexual Orientation')
plt.ylabel('Percentage')
plt.title('Children Removed From Their Homes By Sexual Orientation')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 80)
plt.show()
```



3. Percentage On An IEP While In School By Race

In [584…

```
phase2['33'] = phase2['33'].replace(['No -  I was never on an IEP in school',
                                     'No - I was never on an IEP in school'], 'No')
```

Percentage of African American Children on an IEP while in School

In [586…

```
iep_african_american = phase2[phase2['8'] == 'Black/African American'].groupby('33').size
iep_african_american = (iep_african_american / iep_african_american.sum()) *100
print('Percentage on an IEP while in School - African American',iep_african_american)
```

```
Percentage on an IEP while in School - African American 33
No     78.723404
Yes    21.276596
dtype: float64
```

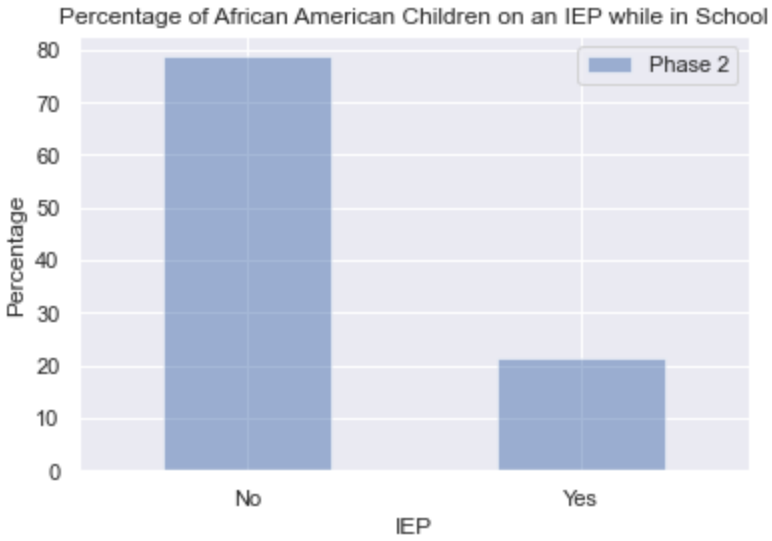
In [587…

```
iep_african_american_count = phase2[phase2['8'] == 'Black/African American'].groupby('33')
print('Percentage on an IEP while in School - African American',iep_african_american_count
```

```
Percentage on an IEP while in School - African American 33
No     37
Yes    10
dtype: int64
```

In [588…

```
iep_african_american.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('IEP')
plt.ylabel('Percentage')
plt.title('Percentage of African American Children on an IEP while in School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of White Children on an IEP while in School

In [589…

```
iep_white = phase2[phase2['8'] == 'White'].groupby('33').size()
iep_white = (iep_white / iep_white.sum()) *100
print('Percentage on an IEP while in School - White',iep_white)
```

```
Percentage on an IEP while in School - White 33
No     71.212121
Yes    28.787879
dtype: float64
```

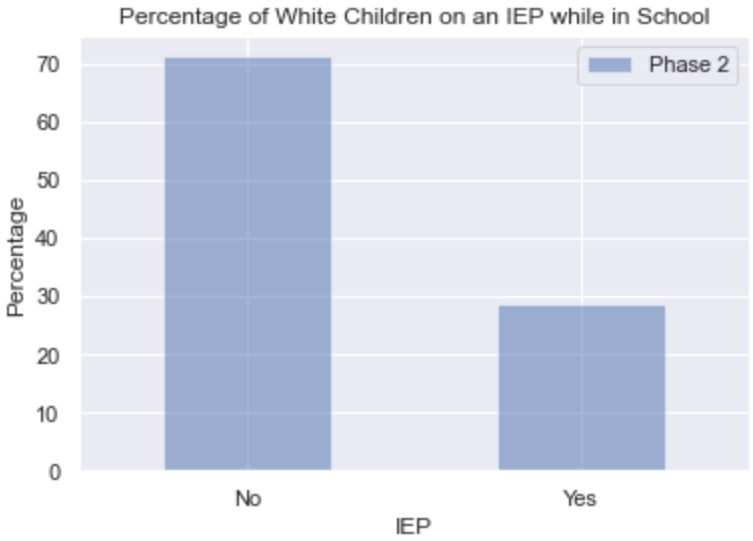
In [590…

```
iep_white_count = phase2[phase2['8'] == 'White'].groupby('33').size()
print('Percentage on an IEP while in School - White',iep_white_count)
```

```
Percentage on an IEP while in School - White 33
No     47
Yes    19
dtype: int64
```

In [591…

```
iep_white.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('IEP')
plt.ylabel('Percentage')
plt.title('Percentage of White Children on an IEP while in School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Asian Children on an IEP while in School

In [592…

```
iep_asian = phase2[phase2['8'] == 'Asian'].groupby('33').size()
iep_asian = (iep_asian / iep_asian.sum()) *100
print('Percentage on an IEP while in School - Asian',iep_asian)
```

```
Percentage on an IEP while in School - Asian 33
No    100.0
dtype: float64
```

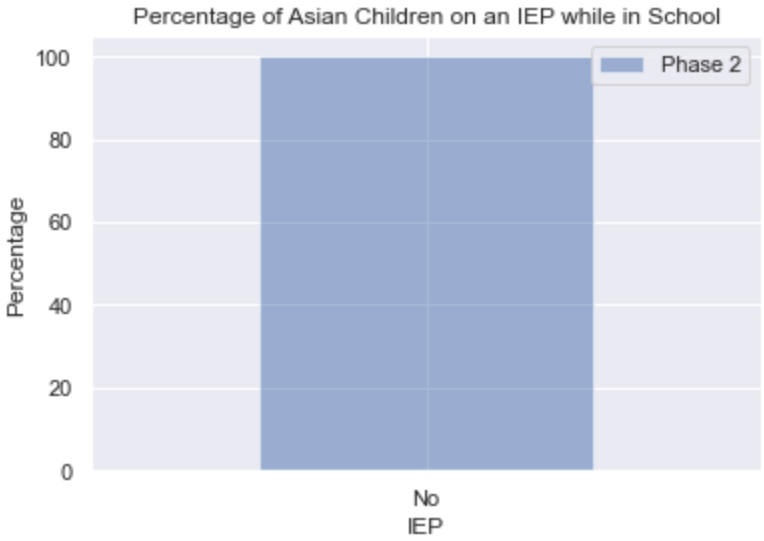
In [593…

```
iep_asian_count = phase2[phase2['8'] == 'Asian'].groupby('33').size()
print('Percentage on an IEP while in School - Asian',iep_asian_count)
```

```
Percentage on an IEP while in School - Asian 33
No    5
dtype: int64
```

In [594…

```
iep_asian.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('IEP')
plt.ylabel('Percentage')
plt.title('Percentage of Asian Children on an IEP while in School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Latinx Children on an IEP while in School

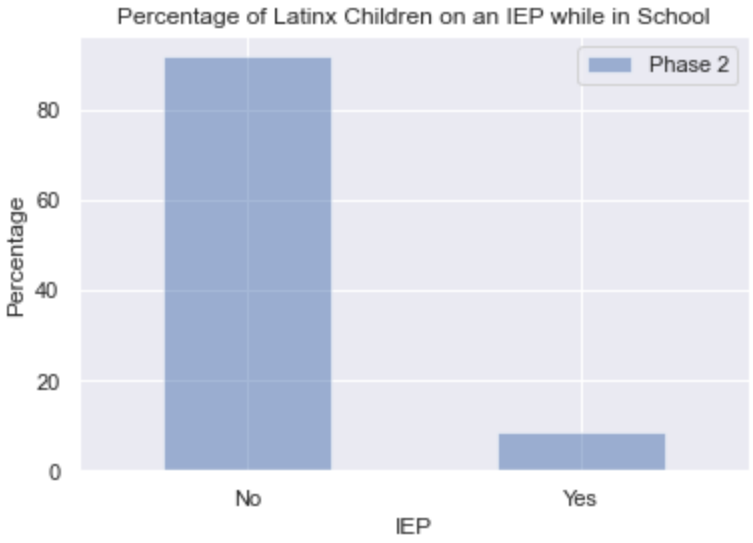
In [595…
```
iep_latinx = phase2[phase2['8'] == 'Latinx'].groupby('33').size()
iep_latinx = (iep_latinx / iep_latinx.sum()) *100
print('Percentage on an IEP while in School - Latinx',iep_latinx)
```

```
Percentage on an IEP while in School - Latinx 33
No     91.666667
Yes     8.333333
dtype: float64
```

In [596…
```
iep_latinx_count = phase2[phase2['8'] == 'Latinx'].groupby('33').size()
print('Percentage on an IEP while in School - Latinx',iep_latinx_count)
```

```
Percentage on an IEP while in School - Latinx 33
No     11
Yes     1
dtype: int64
```

In [597…
```
iep_latinx.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('IEP')
plt.ylabel('Percentage')
plt.title('Percentage of Latinx Children on an IEP while in School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Native American Children on an IEP while in School

In [598…
```
iep_native_american = phase2[phase2['8'] == 'Native American'].groupby('33').size()
iep_native_american = (iep_native_american / iep_native_american.sum()) *100
print('Percentage on an IEP while in School - Native American',iep_native_american)
```

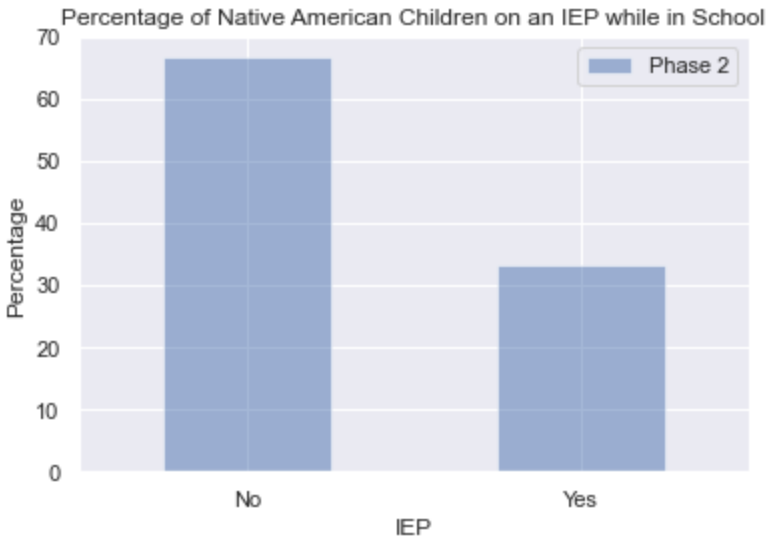
```
Percentage on an IEP while in School - Native American 33
No     66.666667
Yes    33.333333
dtype: float64
```

In [599…
```
iep_native_american_count = phase2[phase2['8'] == 'Native American'].groupby('33').size()
print('Percentage on an IEP while in School - Native American',iep_native_american_count)
```

```
Percentage on an IEP while in School - Native American 33
No     2
Yes    1
dtype: int64
```

In [600…

```
iep_native_american.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('IEP')
plt.ylabel('Percentage')
plt.title('Percentage of Native American Children on an IEP while in School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Multi-Race Children on an IEP while in School

In [601…

```
iep_multi = phase2[phase2['8'] == 'Multi-Race'].groupby('33').size()
iep_multi = (iep_multi / iep_multi.sum()) *100
print('Percentage on an IEP while in School - Multi Race',iep_multi)
```

```
Percentage on an IEP while in School - Multi Race 33
No     68.75
Yes    31.25
dtype: float64
```

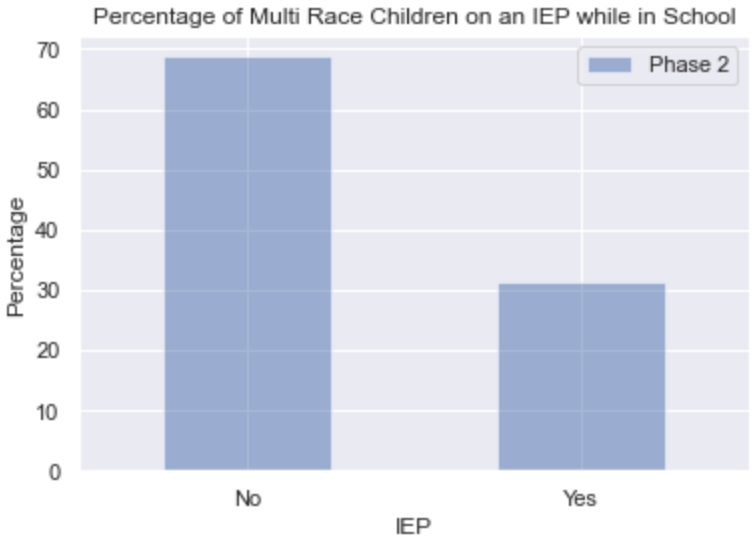
In [602…

```
iep_multi_count = phase2[phase2['8'] == 'Multi-Race'].groupby('33').size()
print('Percentage on an IEP while in School - Multi Race',iep_multi_count)
```

```
Percentage on an IEP while in School - Multi Race 33
No     11
Yes     5
dtype: int64
```

In [603…

```
iep_multi.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('IEP')
plt.ylabel('Percentage')
plt.title('Percentage of Multi Race Children on an IEP while in School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Children Who Prefer to Self Describe on an IEP while in School

In [604…

```
iep_self = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('33').size()
iep_self = (iep_self / iep_self.sum()) *100
print('Percentage on an IEP while in School - Prefer to Self Describe',iep_self)
```

```
Percentage on an IEP while in School - Prefer to Self Describe 33
No     58.333333
Yes    41.666667
dtype: float64
```

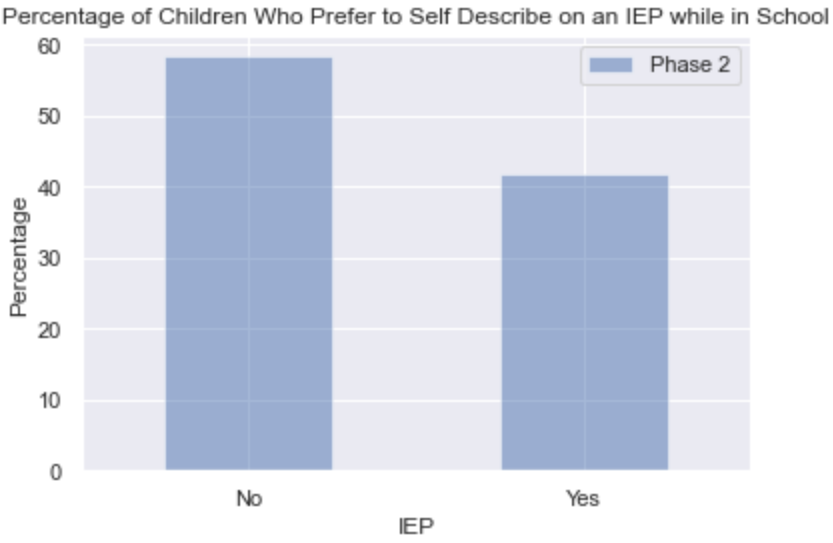
In [605…

```
iep_self_count = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('33').size()
print('Percentage on an IEP while in School - Prefer to self describe',iep_self_count)
```

```
Percentage on an IEP while in School - Prefer to self describe 33
No     7
Yes    5
dtype: int64
```

In [606…

```
iep_self.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('IEP')
plt.ylabel('Percentage')
plt.title('Percentage of Children Who Prefer to Self Describe on an IEP while in School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Children on an IEP in School By Race

In [607…

```
# Phase 2
iep_by_race = phase2[phase2['33'] == 'Yes'].groupby('8').size()
iep_by_race = (iep_by_race / iep_by_race.sum()) *100
print('Children on an IEP in School By Race',iep_by_race)
```

```
Children on an IEP in School By Race 8
Black/African American      24.390244
Latinx                       2.439024
Multi-Race                  12.195122
Native American              2.439024
Prefer to self-describe:    12.195122
White                       46.341463
dtype: float64
```

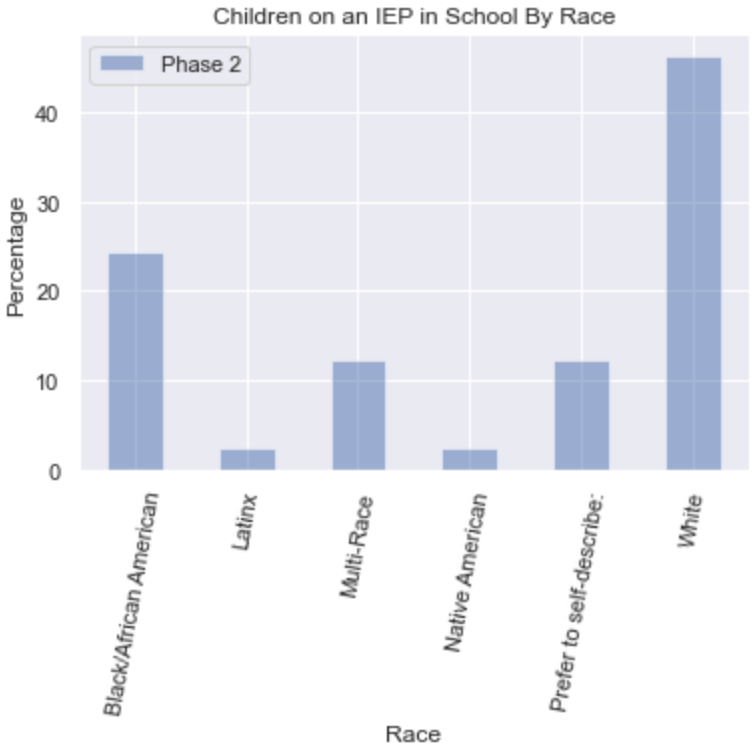
In [608…

```
iep_by_race_count = phase2[phase2['33'] == 'Yes'].groupby('8').size()
print('Count of Children on an IEP in School By Race',iep_by_race_count)
```

```
Count of Children on an IEP in School By Race 8
Black/African American      10
Latinx                       1
Multi-Race                   5
Native American              1
Prefer to self-describe:     5
White                       19
dtype: int64
```

In [609…

```
iep_by_race.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Race')
plt.ylabel('Percentage')
plt.title('Children on an IEP in School By Race')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 80)
plt.show()
```



4. Percentage Suspended While In School By Race

In [610…

```
phase2['61.1'] = phase2['61.1'].replace(['Often','A few times','Once','A few times, Never'
phase2['61.2'] = phase2['61.2'].replace(['Often','A few times','Once','A few times, Never'
phase2['61.3'] = phase2['61.3'].replace(['Often','A few times','Once','A few times, Never'
```

In [612…

```
conditions = [
    (phase2['61.1'] == 'Suspended'),
    (phase2['61.2'] == 'Suspended'),
    (phase2['61.3'] == 'Suspended'),
    (phase2['61.1'] != 'Suspended'),
    (phase2['61.2'] != 'Suspended'),
    (phase2['61.3'] != 'Suspended')
    ]

# create a list of the values we want to assign for each condition
values = ['Yes', 'Yes', 'Yes', 'No', 'No', 'No']

# create a new column and use np.select to assign values to it using our lists as argumen
phase2['Suspended'] = np.select(conditions, values)
```

Percentage of African American Children Suspended While In School

In [613…

```
suspended_by_race_african_american = phase2[phase2['8'] == 'Black/African American'].group
suspended_by_race_african_american = (suspended_by_race_african_american / suspended_by_ra
print('Suspended by Race - African American',suspended_by_race_african_american)
```

```
Suspended by Race - African American Suspended
No     26.415094
Yes    73.584906
dtype: float64
```

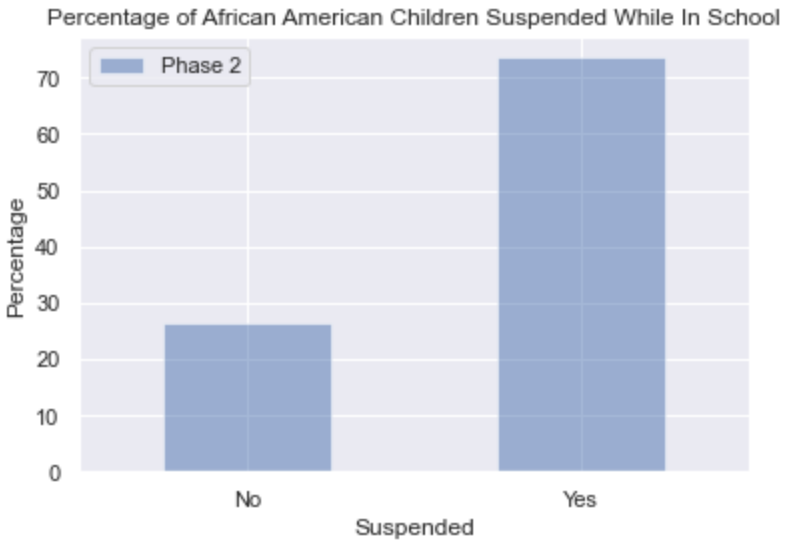
In [614…

```
suspended_by_race_african_american_count = phase2[phase2['8'] == 'Black/African American']
print('Suspended by Race - African American',suspended_by_race_african_american_count)
```

```
Suspended by Race - African American Suspended
No     14
Yes    39
dtype: int64
```

In [615…

```
suspended_by_race_african_american.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Suspended')
plt.ylabel('Percentage')
plt.title('Percentage of African American Children Suspended While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of White People Suspended While In School

In [616…

```
suspended_by_race_white = phase2[phase2['8'] == 'White'].groupby('Suspended').size()
suspended_by_race_white = (suspended_by_race_white / suspended_by_race_white.sum()) *100
print('Suspended by Race - White',suspended_by_race_white)
```

```
Suspended by Race - White Suspended
No     38.571429
Yes    61.428571
dtype: float64
```

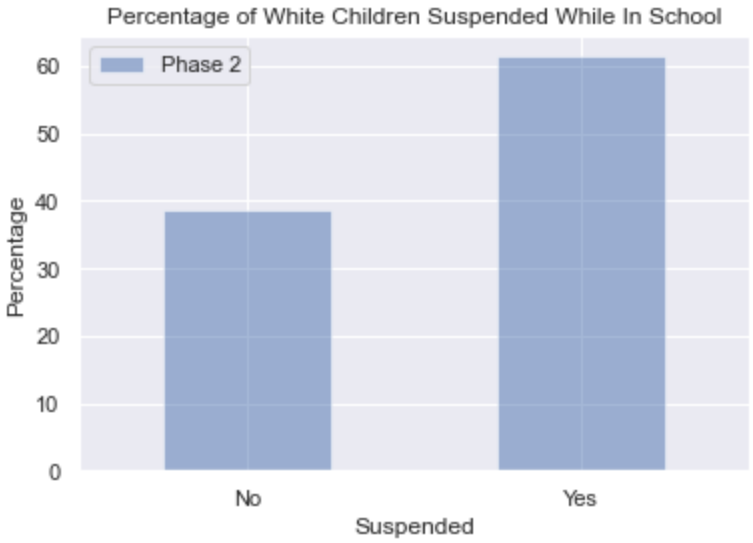
In [617…

```
suspended_by_race_white_count = phase2[phase2['8'] == 'White'].groupby('Suspended').size()
print('Suspended by Race - White',suspended_by_race_white_count)
```

```
Suspended by Race - White Suspended
No     27
Yes    43
dtype: int64
```

In [618…

```
suspended_by_race_white.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Suspended')
plt.ylabel('Percentage')
plt.title('Percentage of White Children Suspended While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Multi-Race People Suspended While In School

In [619…

```
suspended_by_race_multi = phase2[phase2['8'] == 'Multi-Race'].groupby('Suspended').size()
suspended_by_race_multi = (suspended_by_race_multi / suspended_by_race_multi.sum()) *100
print('Suspended by Race - Multi Race',suspended_by_race_multi)
```

```
Suspended by Race - Multi Race Suspended
No      11.764706
Yes     88.235294
dtype: float64
```

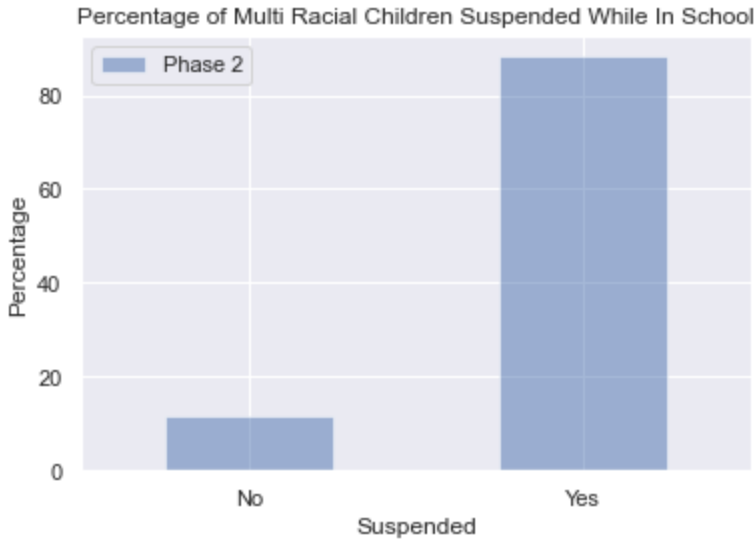
In [718…

```
suspended_by_race_multi_count = phase2[phase2['8'] == 'Multi-Race'].groupby('Suspended').s
print('Suspended by Race - Multi Race',suspended_by_race_multi_count)
```

```
Suspended by Race - Multi Race Suspended
No       2
Yes     15
dtype: int64
```

In [621…

```
suspended_by_race_multi.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Suspended')
plt.ylabel('Percentage')
plt.title('Percentage of Multi Racial Children Suspended While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Latinx People Suspended While In School

In [622…

```
suspended_by_race_latinx = phase2[phase2['8'] == 'Latinx'].groupby('Suspended').size()
suspended_by_race_latinx = (suspended_by_race_latinx / suspended_by_race_latinx.sum()) *10
print('Suspended by Race - Latinx',suspended_by_race_latinx)
```

```
Suspended by Race - Latinx Suspended
No      43.75
Yes     56.25
dtype: float64
```

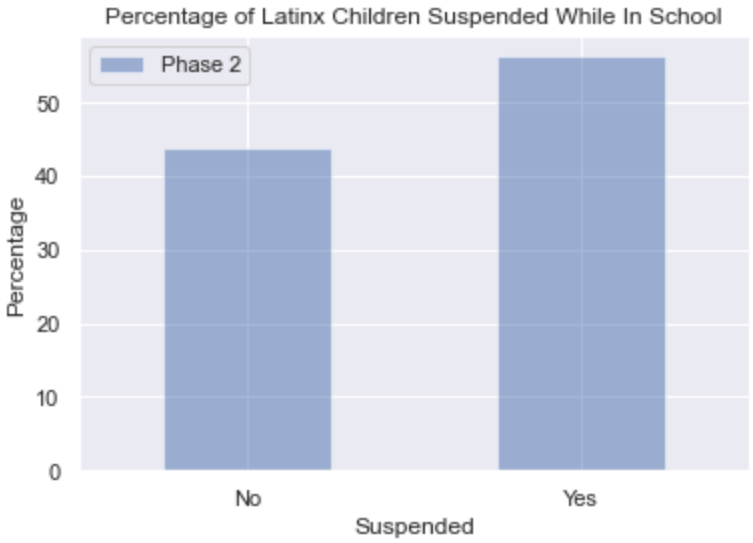
In [623…

```
suspended_by_race_latinx_count = phase2[phase2['8'] == 'Latinx'].groupby('Suspended').size
print('Suspended by Race - Latinx',suspended_by_race_latinx_count)
```

```
Suspended by Race - Latinx Suspended
No      7
Yes     9
dtype: int64
```

In [624…

```
suspended_by_race_latinx.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Suspended')
plt.ylabel('Percentage')
plt.title('Percentage of Latinx Children Suspended While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of People Who Prefer To Self Describe Suspended While In School

In [625…

```
suspended_by_race_self = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('Suspen
suspended_by_race_self = (suspended_by_race_self / suspended_by_race_self.sum()) *100
print('Suspended by Race - Prefer to self describe',suspended_by_race_self)
```

```
Suspended by Race - Prefer to self describe Suspended
No      38.461538
Yes     61.538462
dtype: float64
```

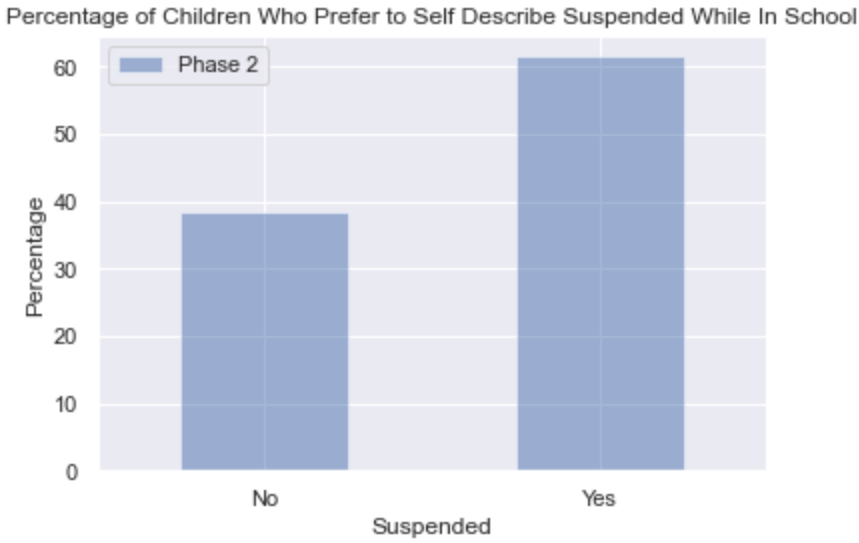
In [626…

```
suspended_by_race_self_count = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('
print('Suspended by Race - Prefer to self describe',suspended_by_race_self_count)
```

```
Suspended by Race - Prefer to self describe Suspended
No      5
Yes     8
dtype: int64
```

In [627…

```
suspended_by_race_self.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Suspended')
plt.ylabel('Percentage')
plt.title('Percentage of Children Who Prefer to Self Describe Suspended While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Asian People Suspended While In School

In [628…

```
suspended_by_race_asian = phase2[phase2['8'] == 'Asian'].groupby('Suspended').size()
suspended_by_race_asian = (suspended_by_race_asian / suspended_by_race_asian.sum()) *100
print('Suspended by Race - Asian',suspended_by_race_asian)
```

```
Suspended by Race - Asian Suspended
No    100.0
dtype: float64
```

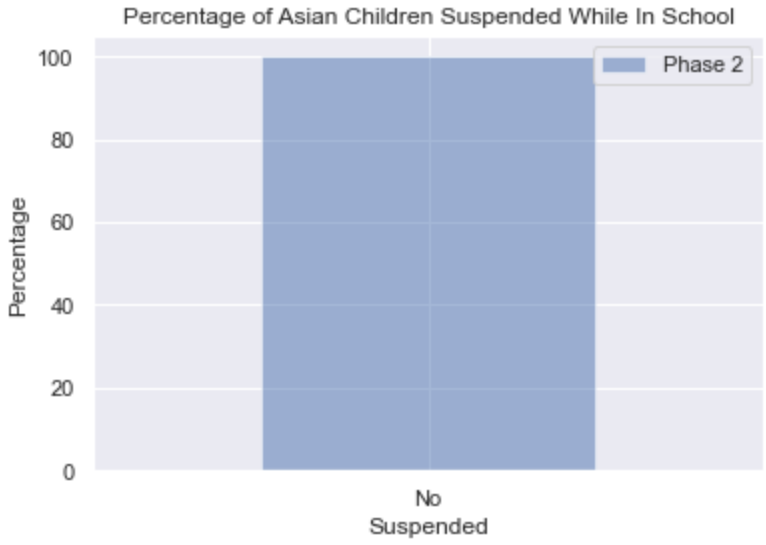
In [629…

```
suspended_by_race_asian_count = phase2[phase2['8'] == 'Asian'].groupby('Suspended').size()
print('Suspended by Race - Asian',suspended_by_race_asian_count)
```

```
Suspended by Race - Asian Suspended
No    5
dtype: int64
```

In [630…

```
suspended_by_race_asian.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Suspended')
plt.ylabel('Percentage')
plt.title('Percentage of Asian Children Suspended While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Native American People Suspended While In School

In [631…

```
suspended_by_race_native = phase2[phase2['8'] == 'Native American'].groupby('Suspended').s
suspended_by_race_native = (suspended_by_race_native / suspended_by_race_native.sum()) *10
print('Suspended by Race - Native American',suspended_by_race_native)
```

```
Suspended by Race - Native American Suspended
No      50.0
Yes     50.0
dtype: float64
```

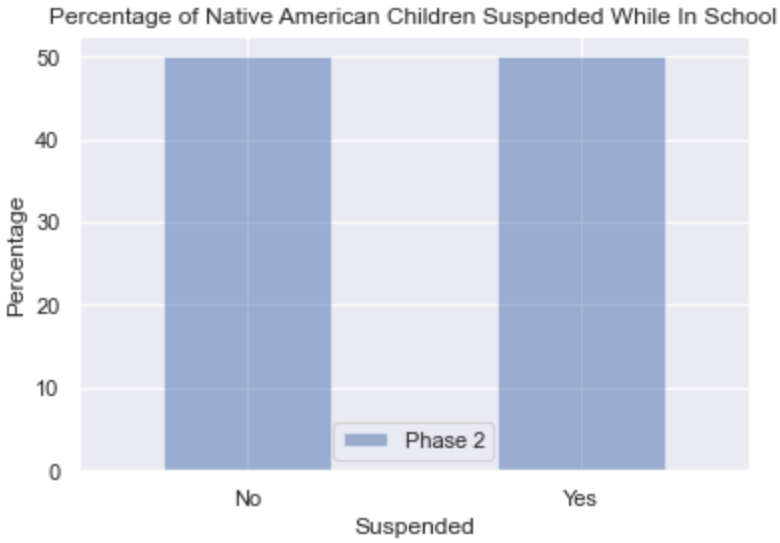
In [632…

```
suspended_by_race_native_count = phase2[phase2['8'] == 'Native American'].groupby('Suspend
print('Suspended by Race - Native American',suspended_by_race_native_count)
```

```
Suspended by Race - Native American Suspended
No      2
Yes     2
dtype: int64
```

In [633…

```
suspended_by_race_native.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Suspended')
plt.ylabel('Percentage')
plt.title('Percentage of Native American Children Suspended While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



People Suspended By Race In Elementary School

In [634…

```
# suspended and race combined values
suspended_by_race_elem = phase2[phase2['61.1'] == 'Suspended'].groupby('8').size()
suspended_by_race_elem = (suspended_by_race_elem / suspended_by_race_elem.sum()) *100
print('Suspended by Race in Elementary School',suspended_by_race_elem)
```

```
Suspended by Race in Elementary School 8
Black/African American      35.294118
Latinx                       8.823529
Multi-Race                  11.764706
Native American              2.941176
Prefer to self-describe:    11.764706
White                       29.411765
dtype: float64
```

In [635…
```
suspended_by_race_elem_count = phase2[phase2['61.1'] == 'Suspended'].groupby('8').size()
print('Suspended by Race in Elementary School',suspended_by_race_elem_count)
```

```
Suspended by Race in Elementary School 8
Black/African American      12
Latinx                       3
Multi-Race                   4
Native American              1
Prefer to self-describe:     4
White                       10
dtype: int64
```

People Suspended By Race In Middle School

In [636…
```
suspended_by_race_middle = phase2[phase2['61.2'] == 'Suspended'].groupby('8').size()
suspended_by_race_middle = (suspended_by_race_middle / suspended_by_race_middle.sum()) *10
print('Suspended by Race in Middle School',suspended_by_race_middle)
```

```
Suspended by Race in Middle School 8
Black/African American      34.177215
Latinx                       8.860759
Multi-Race                  12.658228
Native American              2.531646
Prefer to self-describe:     8.860759
White                       32.911392
dtype: float64
```

In [637…
```
suspended_by_race_middle_count = phase2[phase2['61.2'] == 'Suspended'].groupby('8').size()
print('Suspended by Race in Middle School',suspended_by_race_middle_count)
```

```
Suspended by Race in Middle School 8
Black/African American      27
Latinx                       7
Multi-Race                  10
Native American              2
Prefer to self-describe:     7
White                       26
dtype: int64
```

People Suspended By Race In High School

In [638…
```
suspended_by_race_high = phase2[phase2['61.3'] == 'Suspended'].groupby('8').size()
suspended_by_race_high = (suspended_by_race_high / suspended_by_race_high.sum()) *100
print('Suspended by Race in High School',suspended_by_race_high)
```

```
Suspended by Race in High School 8
Black/African American      34.042553
Latinx                       7.446809
Multi-Race                  12.765957
Native American              2.127660
Prefer to self-describe:     5.319149
White                       38.297872
dtype: float64
```

In [639…
```
suspended_by_race_high_count = phase2[phase2['61.3'] == 'Suspended'].groupby('8').size()
print('Suspended by Race in High School',suspended_by_race_high_count)
```

```
Suspended by Race in High School 8
Black/African American      32
Latinx                       7
Multi-Race                  12
```

```
Native American              2
Prefer to self-describe:     5
White                       36
dtype: int64
```

5. Percentage Expelled While In School By Race

In [640…

```
phase2['62.1'] = phase2['62.1'].replace(['Yes','yes'], 'Expelled')
phase2['62.2'] = phase2['62.2'].replace(['Yes','yes'], 'Expelled')
phase2['62.3'] = phase2['62.3'].replace(['Yes','yes'], 'Expelled')
```

In [642…

```
conditions = [
    (phase2['62.1'] == 'Expelled'),
    (phase2['62.2'] == 'Expelled'),
    (phase2['62.3'] == 'Expelled'),
    (phase2['62.1'] != 'Expelled'),
    (phase2['62.2'] != 'Expelled'),
    (phase2['62.3'] != 'Expelled')
    ]

# create a list of the values we want to assign for each condition
values = ['Yes', 'Yes', 'Yes', 'No', 'No', 'No']

# create a new column and use np.select to assign values to it using our lists as argumen
phase2['Expelled'] = np.select(conditions, values)
```

Percentage of African American Children Expelled While In School

In [643…

```
suspended_by_race_african_american = phase2[phase2['8'] == 'Black/African American'].group
suspended_by_race_african_american = (suspended_by_race_african_american / suspended_by_ra
print('Expelled by Race - African American',suspended_by_race_african_american)
```

```
Expelled by Race - African American Expelled
No     73.584906
Yes    26.415094
dtype: float64
```

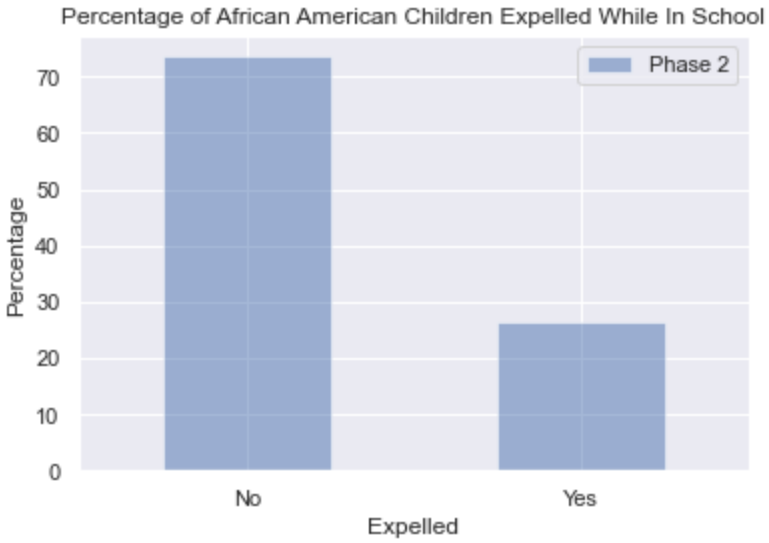
In [644…

```
suspended_by_race_african_american_count = phase2[phase2['8'] == 'Black/African American']
print('Expelled by Race - African American',suspended_by_race_african_american_count)
```

```
Expelled by Race - African American Expelled
No     39
Yes    14
dtype: int64
```

In [645…

```
suspended_by_race_african_american.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Expelled')
plt.ylabel('Percentage')
plt.title('Percentage of African American Children Expelled While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of White Children Expelled While In School

In [646…

```
expelled_by_race_white = phase2[phase2['8'] == 'White'].groupby('Expelled').size()
expelled_by_race_white = (expelled_by_race_white / expelled_by_race_white.sum()) *100
print('Expelled by Race - White',expelled_by_race_white)
```

```
Expelled by Race - White Expelled
No     80.0
Yes    20.0
dtype: float64
```

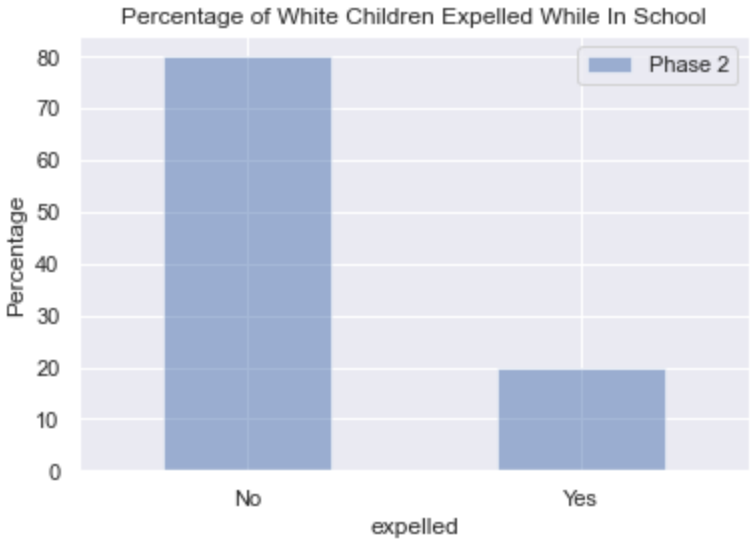
In [647…

```
expelled_by_race_white_count = phase2[phase2['8'] == 'White'].groupby('Expelled').size()
print('Expelled by Race - White',expelled_by_race_white_count)
```

```
Expelled by Race - White Expelled
No     56
Yes    14
dtype: int64
```

In [648…

```
expelled_by_race_white.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('expelled')
plt.ylabel('Percentage')
plt.title('Percentage of White Children Expelled While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Multi Racial Children Expelled While In School

In [649…

```
expelled_by_race_multi = phase2[phase2['8'] == 'Multi-Race'].groupby('Expelled').size()
expelled_by_race_multi = (expelled_by_race_multi / expelled_by_race_multi.sum()) *100
print('Expelled by Race - Multi Race',expelled_by_race_multi)
```

```
Expelled by Race - Multi Race Expelled
No     70.588235
Yes    29.411765
dtype: float64
```

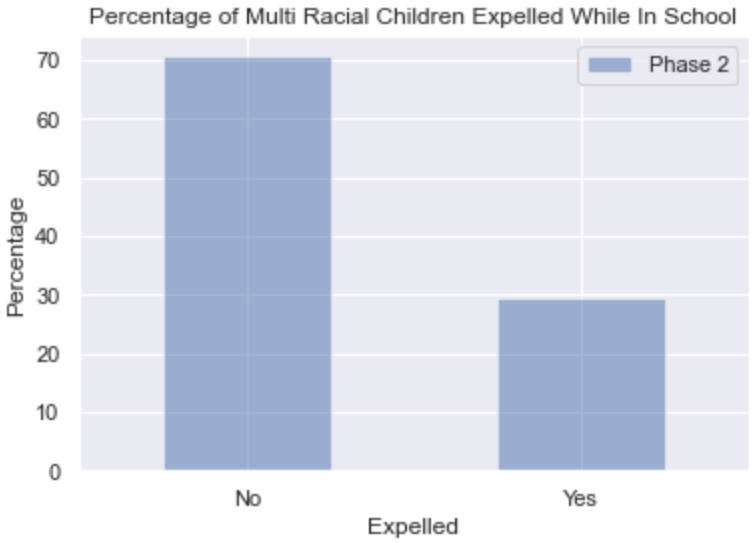
In [650…

```
expelled_by_race_multi_count = phase2[phase2['8'] == 'Multi-Race'].groupby('Expelled').siz
print('Expelled by Race - Multi Race',expelled_by_race_multi_count)
```

```
Expelled by Race - Multi Race Expelled
No     12
Yes     5
dtype: int64
```

In [651…

```
expelled_by_race_multi.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Expelled')
plt.ylabel('Percentage')
plt.title('Percentage of Multi Racial Children Expelled While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Latinx Children Expelled While In School

In [652…

```
expelled_by_race_latinx = phase2[phase2['8'] == 'Latinx'].groupby('Expelled').size()
expelled_by_race_latinx = (expelled_by_race_latinx / expelled_by_race_latinx.sum()) *100
print('Expelled by Race - Latinx',expelled_by_race_latinx)
```

```
Expelled by Race - Latinx Expelled
No      62.5
Yes     37.5
dtype: float64
```

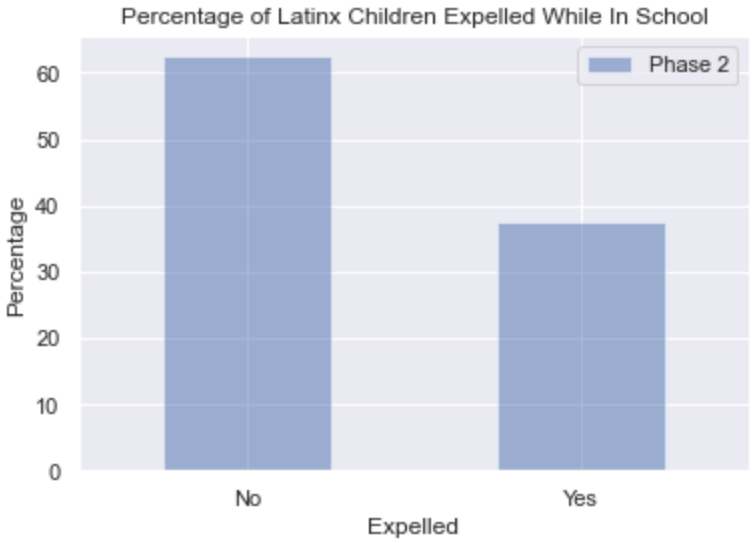
In [653…

```
expelled_by_race_latinx_count = phase2[phase2['8'] == 'Latinx'].groupby('Expelled').size()
print('Expelled by Race - Latinx',expelled_by_race_latinx_count)
```

```
Expelled by Race - Latinx Expelled
No      10
Yes      6
dtype: int64
```

In [654…

```
expelled_by_race_latinx.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Expelled')
plt.ylabel('Percentage')
plt.title('Percentage of Latinx Children Expelled While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Asian Children Expelled While In School

In [655…

```
expelled_by_race_asian = phase2[phase2['8'] == 'Asian'].groupby('Expelled').size()
expelled_by_race_asian = (expelled_by_race_asian / expelled_by_race_asian.sum()) *100
print('Expelled by Race - Asian',expelled_by_race_asian)
```

```
Expelled by Race - Asian Expelled
No    100.0
dtype: float64
```

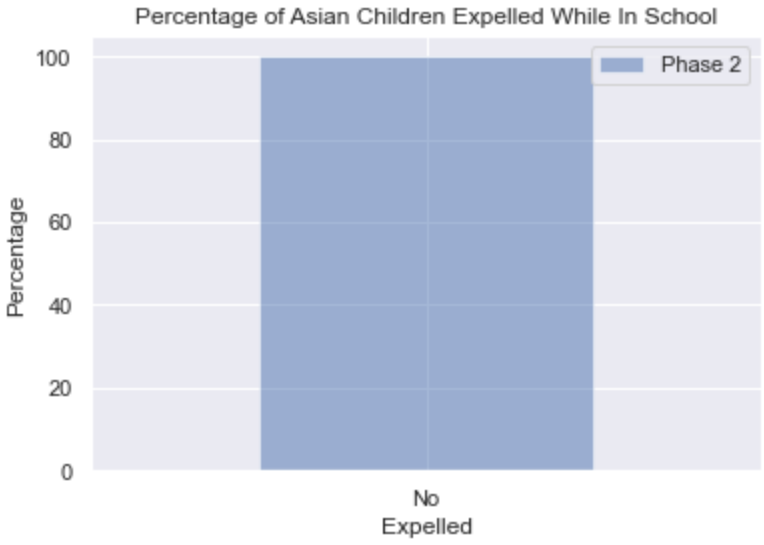
In [656…

```
expelled_by_race_asian_count = phase2[phase2['8'] == 'Asian'].groupby('Expelled').size()
print('Expelled by Race - Asian',expelled_by_race_asian_count)
```

```
Expelled by Race - Asian Expelled
No    5
dtype: int64
```

In [657…

```
expelled_by_race_asian.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Expelled')
plt.ylabel('Percentage')
plt.title('Percentage of Asian Children Expelled While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Native American Children Expelled While In School

In [658…

```
expelled_by_race_native = phase2[phase2['8'] == 'Native American'].groupby('Expelled').siz
expelled_by_race_native = (expelled_by_race_native / expelled_by_race_native.sum()) *100
print('Expelled by Race - Native American',expelled_by_race_native)
```

```
Expelled by Race - Native American Expelled
No     50.0
Yes    50.0
dtype: float64
```

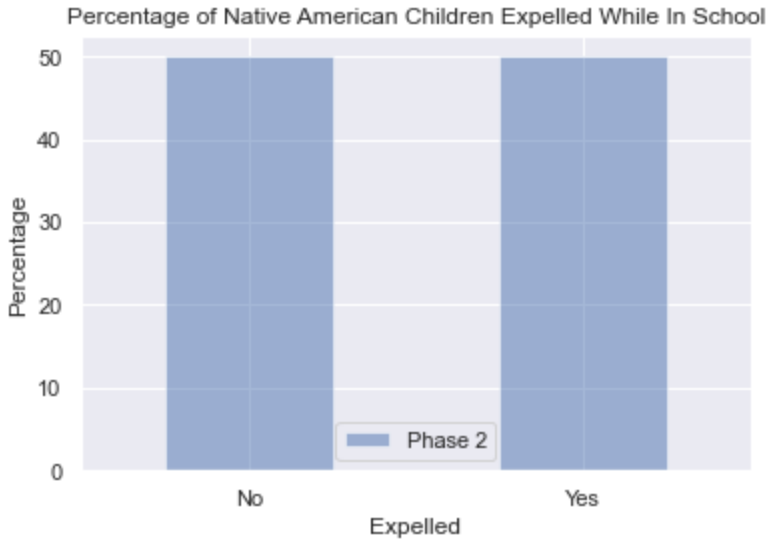
In [659…

```
expelled_by_race_native_count = phase2[phase2['8'] == 'Native American'].groupby('Expelled
print('Expelled by Race - Native American',expelled_by_race_native_count)
```

```
Expelled by Race - Native American Expelled
No     2
Yes    2
dtype: int64
```

In [660…

```
expelled_by_race_native.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Expelled')
plt.ylabel('Percentage')
plt.title('Percentage of Native American Children Expelled While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Children Who Prefer to Self Describe Expelled While In School

In [661…

```
expelled_by_race_self = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('Expelle
expelled_by_race_self = (expelled_by_race_self / expelled_by_race_self.sum()) *100
print('Expelled by Race - Prefer to self describe',expelled_by_race_self)
```

```
Expelled by Race - Prefer to self describe Expelled
No     76.923077
Yes    23.076923
dtype: float64
```

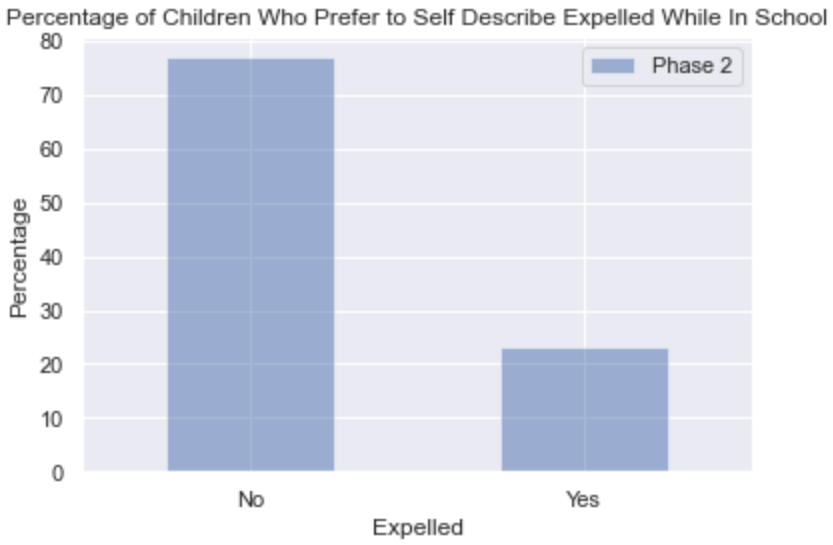
In [662…

```
expelled_by_race_self_count = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('E
print('Expelled by Race - Prefer to self describe',expelled_by_race_self_count)
```

```
Expelled by Race - Prefer to self describe Expelled
No     10
Yes     3
dtype: int64
```

In [663…

```
expelled_by_race_self.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Expelled')
plt.ylabel('Percentage')
plt.title('Percentage of Children Who Prefer to Self Describe Expelled While In School')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



People Expelled by Race in Elementary School

In [664…

```
# expelled and race combined values
expelled_by_race_elem = phase2[phase2['62.1'] == 'Expelled'].groupby('8').size()
expelled_by_race_elem = (expelled_by_race_elem / expelled_by_race_elem.sum()) *100
print('Expelled by Race in Elementary School',expelled_by_race_elem)
```

```
Expelled by Race in Elementary School 8
Black/African American      41.666667
Latinx                      16.666667
Native American              8.333333
Prefer to self-describe:    16.666667
White                       16.666667
dtype: float64
```

In [665…

```
expelled_by_race_elem_count = phase2[phase2['62.1'] == 'Expelled'].groupby('8').size()
print('Expelled by Race in Elementary School',expelled_by_race_elem_count)
```

```
Expelled by Race in Elementary School 8
Black/African American      5
Latinx                      2
Native American             1
Prefer to self-describe:    2
White                       2
dtype: int64
```

People Expelled by Race in Middle School

In [666…

```
# expelled and race combined values
```

```
expelled_by_race_middle = phase2[phase2['62.2'] == 'Expelled'].groupby('8').size()
expelled_by_race_middle = (expelled_by_race_middle / expelled_by_race_middle.sum()) *100
print('Expelled by Race in Middle School',expelled_by_race_middle)
```

```
Expelled by Race in Middle School 8
Black/African American      13.333333
Latinx                      40.000000
Native American              6.666667
Prefer to self-describe:    13.333333
White                       26.666667
dtype: float64
```

In [667…

```
expelled_by_race_middle_count = phase2[phase2['62.2'] == 'Expelled'].groupby('8').size()
print('Expelled by Race in Middle School',expelled_by_race_middle_count)
```

```
Expelled by Race in Middle School 8
Black/African American      2
Latinx                      6
Native American             1
Prefer to self-describe:    2
White                       4
dtype: int64
```

People Expelled by Race in High School

In [668…

```
# expelled and race combined values
expelled_by_race_high = phase2[phase2['62.1'] == 'Expelled'].groupby('8').size()
expelled_by_race_high = (expelled_by_race_high / expelled_by_race_high.sum()) *100
print('Expelled by Race in High School',expelled_by_race_high)
```

```
Expelled by Race in High School 8
Black/African American      41.666667
Latinx                      16.666667
Native American              8.333333
Prefer to self-describe:    16.666667
White                       16.666667
dtype: float64
```

In [669…

```
expelled_by_race_high_count = phase2[phase2['62.1'] == 'Expelled'].groupby('8').size()
print('Expelled by Race in High School',expelled_by_race_high_count)
```

```
Expelled by Race in High School 8
Black/African American      5
Latinx                      2
Native American             1
Prefer to self-describe:    2
White                       2
dtype: int64
```

6. Percentage Arrested Under The Age of 18 By Race

Percentage of African Americans Arrested Under the Age of 18

In [670…

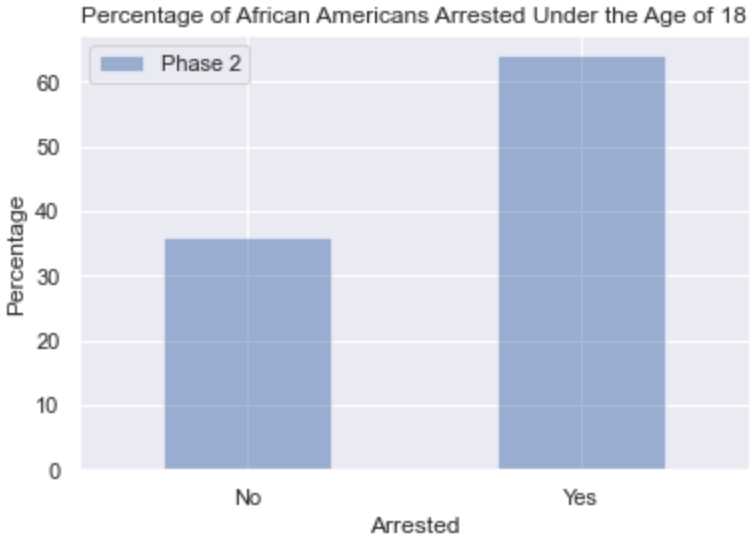
```
arrested_by_race_african_american = phase2[phase2['8'] == 'Black/African American'].groupb
arrested_by_race_african_american = (arrested_by_race_african_american / arrested_by_race_
print('Arrested by Race - African American',arrested_by_race_african_american)
```

```
Arrested by Race - African American 47
No     36.0
Yes    64.0
dtype: float64
```

In [671…
```
arrested_by_race_african_american_count = phase2[phase2['8'] == 'Black/African American'].
print('Arrested by Race - African American',arrested_by_race_african_american_count)
```

```
Arrested by Race - African American 47
No     18
Yes    32
dtype: int64
```

In [672…
```
arrested_by_race_african_american.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of African Americans Arrested Under the Age of 18')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of White People Arrested Under the Age of 18

In [673…
```
arrested_by_race_white = phase2[phase2['8'] == 'White'].groupby('47').size()
arrested_by_race_white = (arrested_by_race_white / arrested_by_race_white.sum()) *100
print('Arrested by Race - White',arrested_by_race_white)
```

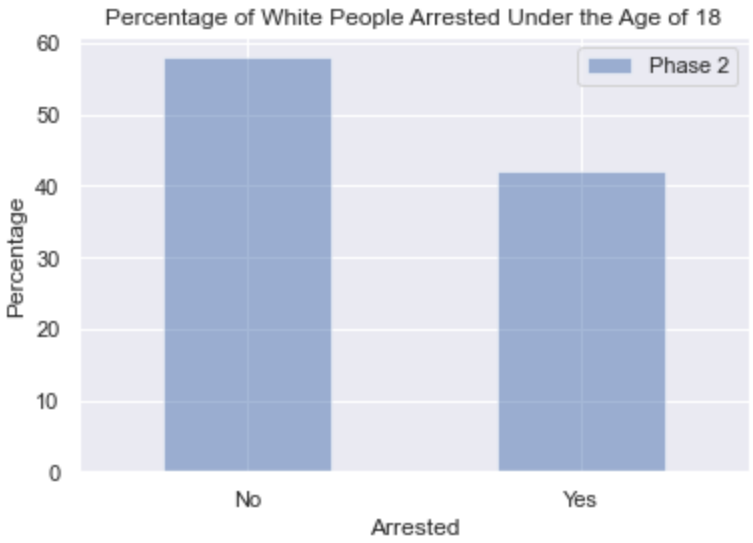
```
Arrested by Race - White 47
No     57.971014
Yes    42.028986
dtype: float64
```

In [674…
```
arrested_by_race_white_count = phase2[phase2['8'] == 'White'].groupby('47').size()
print('Arrested by Race - White',arrested_by_race_white_count)
```

```
Arrested by Race - White 47
No     40
Yes    29
dtype: int64
```

In [675…
```
arrested_by_race_white.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of White People Arrested Under the Age of 18')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
```

```
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Asians Arrested Under the Age of 18

In [676…

```
arrested_by_race_asian = phase2[phase2['8'] == 'Asian'].groupby('47').size()
arrested_by_race_asian = (arrested_by_race_asian / arrested_by_race_asian.sum()) *100
print('Arrested by Race - Asian',arrested_by_race_asian)
```

```
Arrested by Race - Asian 47
No    100.0
dtype: float64
```

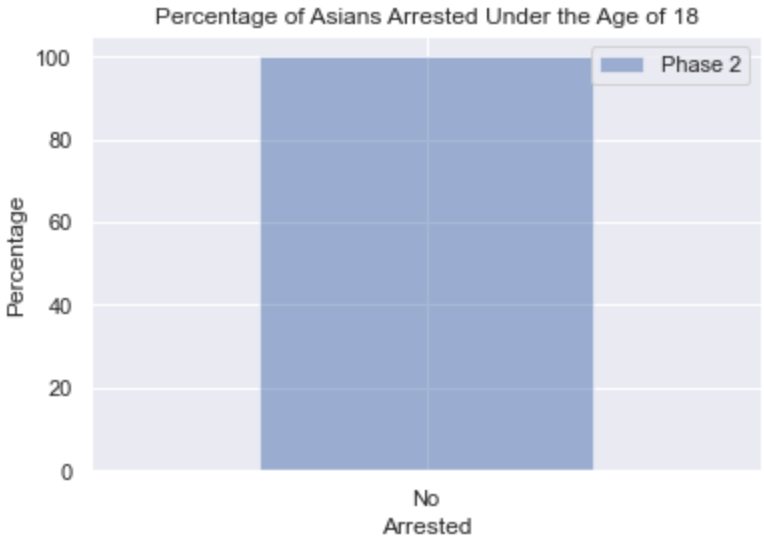
In [677…

```
arrested_by_race_asian_count = phase2[phase2['8'] == 'Asian'].groupby('47').size()
print('Arrested by Race - Asian',arrested_by_race_asian_count)
```

```
Arrested by Race - Asian 47
No    5
dtype: int64
```

In [678…

```
arrested_by_race_asian.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of Asians Arrested Under the Age of 18')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Native Americans Arrested Under the Age of 18

In [679…

```
arrested_by_race_native_american = phase2[phase2['8'] == 'Native American'].groupby('47')
arrested_by_race_native_american = (arrested_by_race_native_american / arrested_by_race_na
print('Arrested by Race - Native American',arrested_by_race_native_american)
```

```
Arrested by Race - Native American 47
No     66.666667
Yes    33.333333
dtype: float64
```

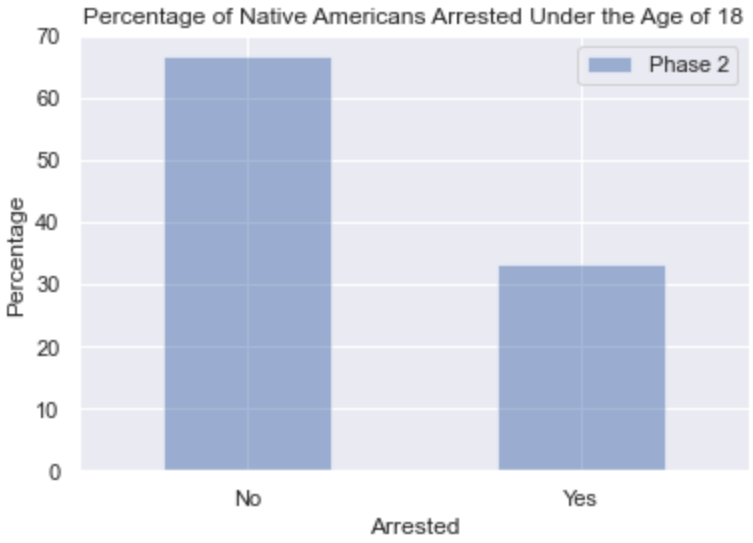
In [680…

```
arrested_by_race_native_american_count = phase2[phase2['8'] == 'Native American'].groupby
print('Arrested by Race - Native American',arrested_by_race_native_american_count)
```

```
Arrested by Race - Native American 47
No     2
Yes    1
dtype: int64
```

In [681…

```
arrested_by_race_native_american.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of Native Americans Arrested Under the Age of 18')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Latinx People Arrested Under the Age of 18

In [682…

```
arrested_by_race_latinx = phase2[phase2['8'] == 'Latinx'].groupby('47').size()
arrested_by_race_latinx = (arrested_by_race_latinx / arrested_by_race_latinx.sum()) *100
print('Arrested by Race - Latinx',arrested_by_race_latinx)
```

```
Arrested by Race - Latinx 47
No     50.0
Yes    50.0
dtype: float64
```

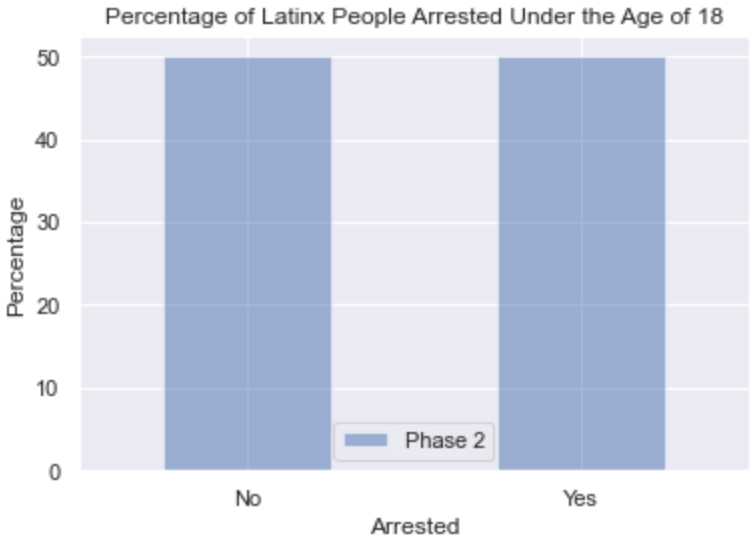
In [683…

```
arrested_by_race_latinx_count = phase2[phase2['8'] == 'Latinx'].groupby('47').size()
print('Arrested by Race - Latinx',arrested_by_race_latinx_count)
```

```
Arrested by Race - Latinx 47
No     7
Yes    7
dtype: int64
```

In [684…

```
arrested_by_race_latinx.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of Latinx People Arrested Under the Age of 18')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Multi Racial People Arrested Under the Age of 18

In [685…

```
arrested_by_race_multi = phase2[phase2['8'] == 'Multi-Race'].groupby('47').size()
arrested_by_race_multi = (arrested_by_race_multi / arrested_by_race_multi.sum()) *100
print('Arrested by Race - Multi Race',arrested_by_race_multi)
```

```
Arrested by Race - Multi Race 47
No     47.058824
Yes    52.941176
dtype: float64
```

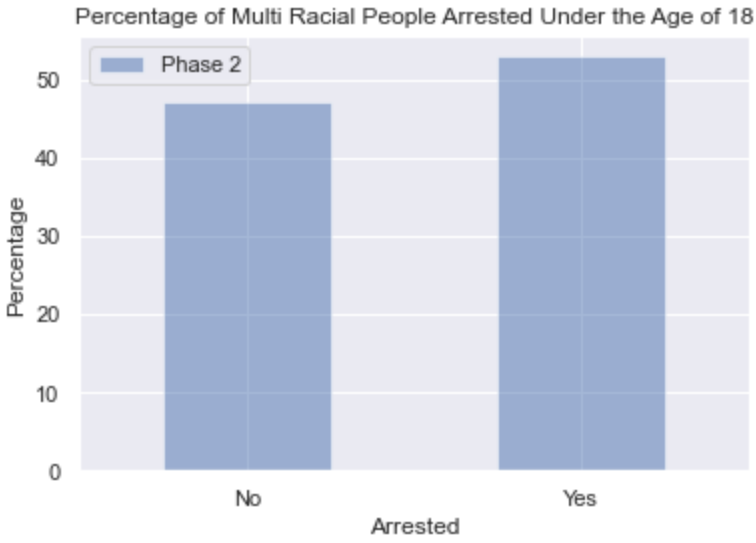
In [686…

```
arrested_by_race_multi_count = phase2[phase2['8'] == 'Multi-Race'].groupby('47').size()
print('Arrested by Race - Multi Race',arrested_by_race_multi_count)
```

```
Arrested by Race - Multi Race 47
No     8
Yes    9
dtype: int64
```

In [687…

```
arrested_by_race_multi.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of Multi Racial People Arrested Under the Age of 18')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of People Who Prefer to Self Describe Arrested Under the Age of 18

In [688…

```
arrested_by_race_self = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('47').si
arrested_by_race_self = (arrested_by_race_self / arrested_by_race_self.sum()) *100
print('Arrested by Race - Prefer to self describe',arrested_by_race_self)
```

```
Arrested by Race - Prefer to self describe 47
No     46.153846
Yes    53.846154
dtype: float64
```

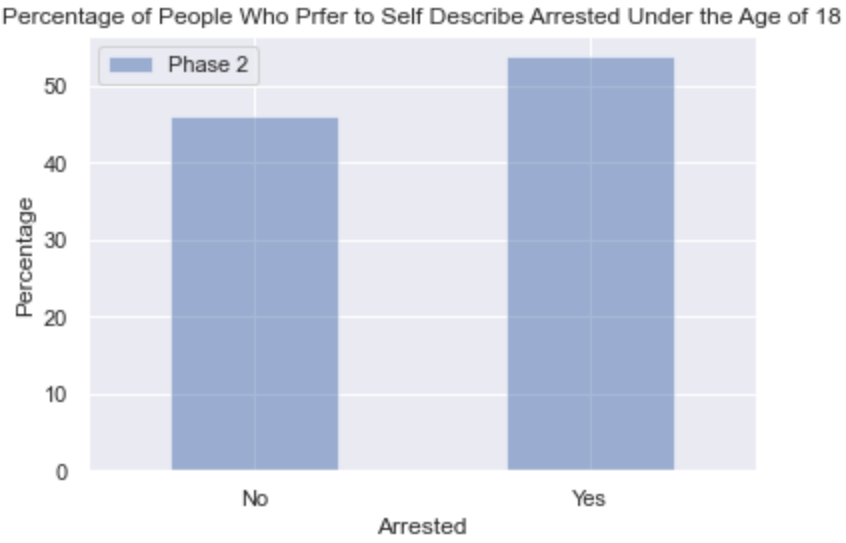
In [689…

```
arrested_by_race_self_count = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('4
print('Arrested by Race - Prefer to self describe',arrested_by_race_self_count)
```

```
Arrested by Race - Prefer to self describe 47
No     6
Yes    7
dtype: int64
```

In [690…

```
arrested_by_race_self.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of People Who Prfer to Self Describe Arrested Under the Age of 18')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



7. Percentage Experiencing a School Based Arrest By Race

Percentage of African Americans With a School Based Arrest

In [691…

```
school_arrest_african_american = phase2[phase2['8'] == 'Black/African American'].groupby('
school_arrest_african_american = (school_arrest_african_american / school_arrest_african_a
print('School Based Arrest - African American',school_arrest_african_american)
```

```
School Based Arrest - African American 30
No     84.313725
Yes    15.686275
dtype: float64
```

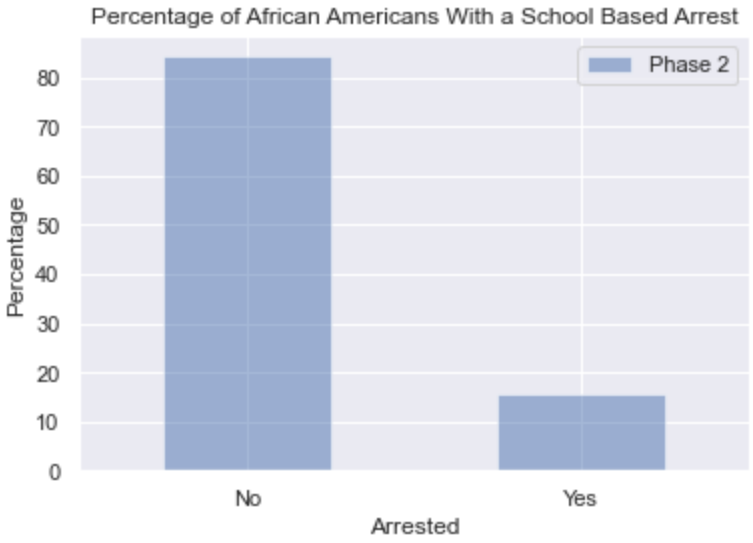
In [692…

```
school_arrest_african_american_count = phase2[phase2['8'] == 'Black/African American'].gro
print('School Based Arrest - African American',school_arrest_african_american_count)
```

```
School Based Arrest - African American 30
No     43
Yes     8
dtype: int64
```

In [693…

```
school_arrest_african_american.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of African Americans With a School Based Arrest')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of White People With a School Based Arrest

In [694…

```
school_arrest_white = phase2[phase2['8'] == 'White'].groupby('30').size()
school_arrest_white = (school_arrest_white / school_arrest_white.sum()) *100
print('School Based Arrest - White',school_arrest_white)
```

```
School Based Arrest - White 30
No     86.363636
Yes    13.636364
dtype: float64
```

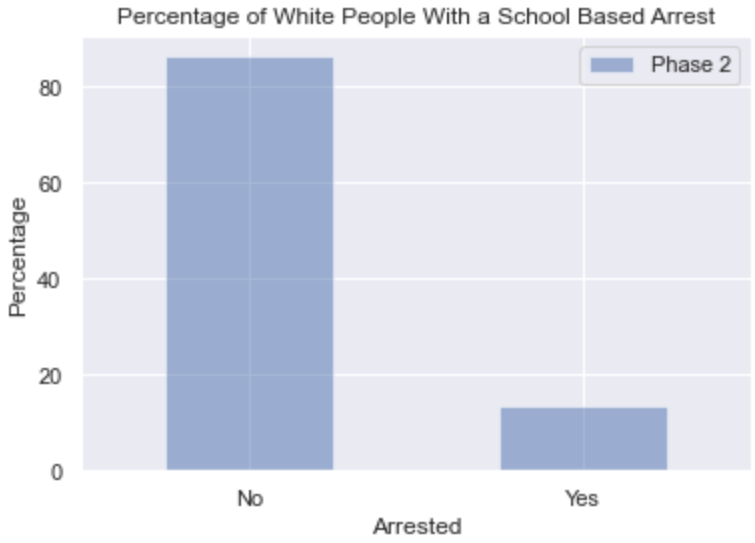
In [695…

```
school_arrest_white_count = phase2[phase2['8'] == 'White'].groupby('30').size()
print('School Based Arrest - White',school_arrest_white_count)
```

```
School Based Arrest - White 30
No     57
Yes     9
dtype: int64
```

In [696…

```
school_arrest_white.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of White People With a School Based Arrest')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Asians With a School Based Arrest

In [697…

```
school_arrest_asian = phase2[phase2['8'] == 'Asian'].groupby('30').size()
school_arrest_asian = (school_arrest_asian / school_arrest_asian.sum()) *100
print('School Based Arrest - Asian',school_arrest_asian)
```

```
School Based Arrest - Asian 30
No    100.0
dtype: float64
```

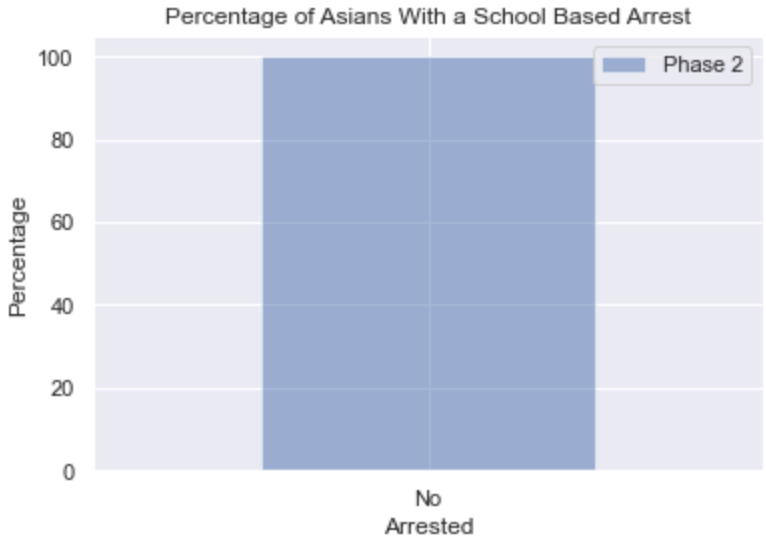
In [698…

```
school_arrest_asian_count = phase2[phase2['8'] == 'Asian'].groupby('30').size()
print('School Based Arrest - Asian',school_arrest_asian_count)
```

```
School Based Arrest - Asian 30
No    5
dtype: int64
```

In [699…

```
school_arrest_asian.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of Asians With a School Based Arrest')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Latinx People With a School Based Arrest

In [700…

```
school_arrest_latinx = phase2[phase2['8'] == 'Latinx'].groupby('30').size()
school_arrest_latinx = (school_arrest_latinx / school_arrest_latinx.sum()) *100
print('School Based Arrest - Latinx',school_arrest_latinx)
```

```
School Based Arrest - Latinx 30
No     71.428571
Yes    28.571429
dtype: float64
```

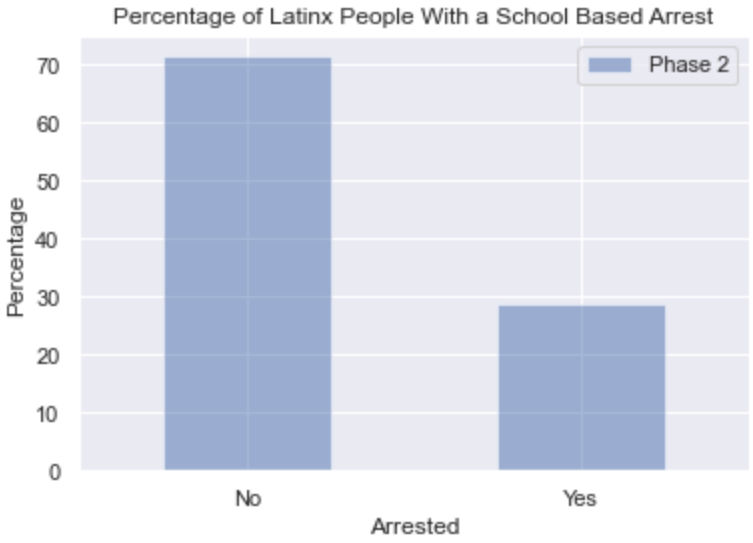
In [701…

```
school_arrest_latinx_count = phase2[phase2['8'] == 'Latinx'].groupby('30').size()
print('School Based Arrest - Latinx',school_arrest_latinx_count)
```

```
School Based Arrest - Latinx 30
No     10
Yes     4
dtype: int64
```

In [702…

```
school_arrest_latinx.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of Latinx People With a School Based Arrest')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Native Americans With a School Based Arrest

In [703…

```
school_arrest_native_american = phase2[phase2['8'] == 'Native American'].groupby('30').siz
school_arrest_native_american = (school_arrest_native_american / school_arrest_native_amer
print('School Based Arrest - Native American',school_arrest_native_american)
```

```
School Based Arrest - Native American 30
No     66.666667
Yes    33.333333
dtype: float64
```

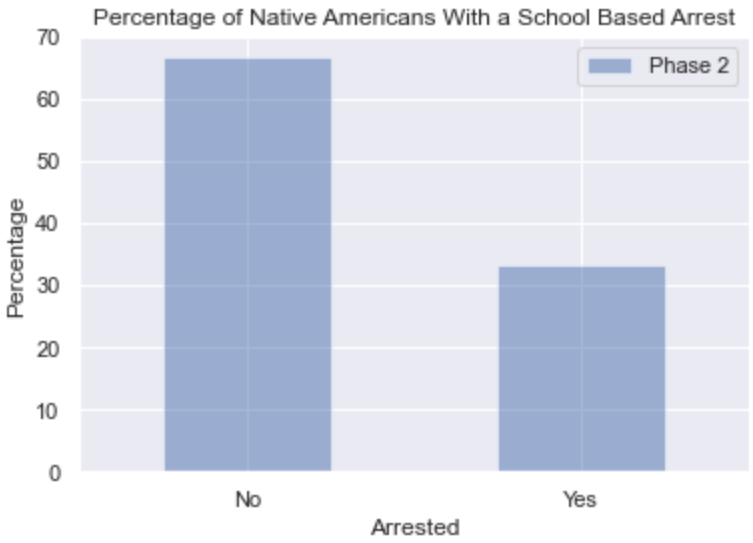
In [704…

```
school_arrest_native_american_count = phase2[phase2['8'] == 'Native American'].groupby('3(
print('School Based Arrest - Native American',school_arrest_native_american_count)
```

```
School Based Arrest - Native American 30
No     2
Yes    1
dtype: int64
```

In [705…

```
school_arrest_native_american.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of Native Americans With a School Based Arrest')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Multi Racial People With a School Based Arrest

In [706…

```
school_arrest_multi = phase2[phase2['8'] == 'Multi-Race'].groupby('30').size()
school_arrest_multi = (school_arrest_multi / school_arrest_multi.sum()) *100
print('School Based Arrest - Multi Race',school_arrest_multi)
```

```
School Based Arrest - Multi Race 30
No     80.0
Yes    20.0
dtype: float64
```

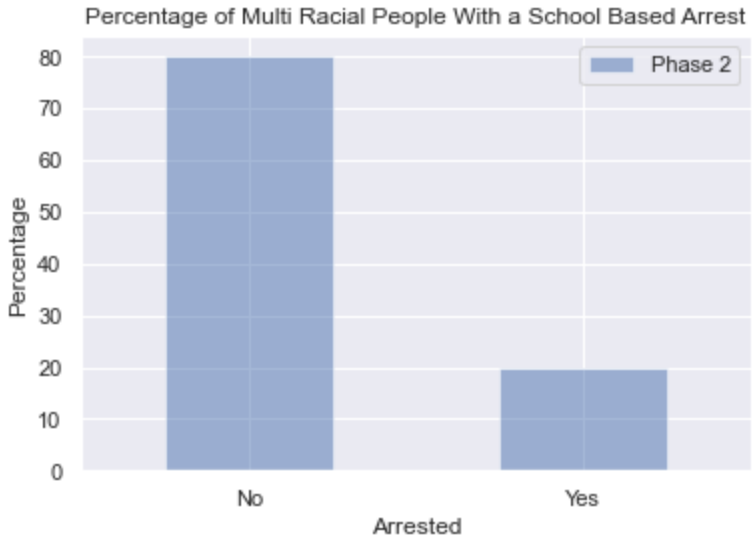
In [707…

```
school_arrest_multi_count = phase2[phase2['8'] == 'Multi-Race'].groupby('30').size()
print('School Based Arrest - Multi Race',school_arrest_multi_count)
```

```
School Based Arrest - Multi Race 30
No     12
Yes     3
dtype: int64
```

In [708…

```
school_arrest_multi.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of Multi Racial People With a School Based Arrest')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of People Who Prefer to Self Describe With a School Based Arrest

In [709…

```
school_arrest_self = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('30').size
school_arrest_self = (school_arrest_self / school_arrest_self.sum()) *100
print('School Based Arrest - Prefer to Self Describe',school_arrest_self)
```

```
School Based Arrest - Prefer to Self Describe 30
No     92.307692
Yes     7.692308
dtype: float64
```

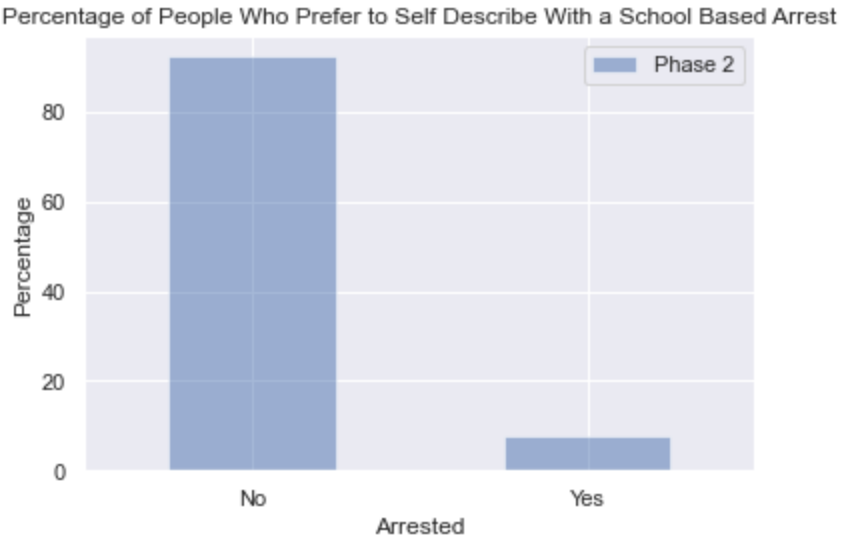
In [710…

```
school_arrest_self_count = phase2[phase2['8'] == 'Prefer to self-describe:'].groupby('30')
print('School Based Arrest - African American',school_arrest_self_count)
```

```
School Based Arrest - African American 30
No     12
Yes     1
dtype: int64
```

In [711…

```
school_arrest_self.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of People Who Prefer to Self Describe With a School Based Arrest')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



8. Percentage Experiencing a School Based Arrest By Gender

Percentage of Females With a School Based Arrest

In [712…

```
school_arrest_female = phase2[phase2['9'] == 'Female'].groupby('30').size()
school_arrest_female = (school_arrest_female / school_arrest_female.sum()) *100
print('School Based Arrest - Female',school_arrest_female)
```

```
School Based Arrest - Female 30
No     87.341772
Yes    12.658228
dtype: float64
```

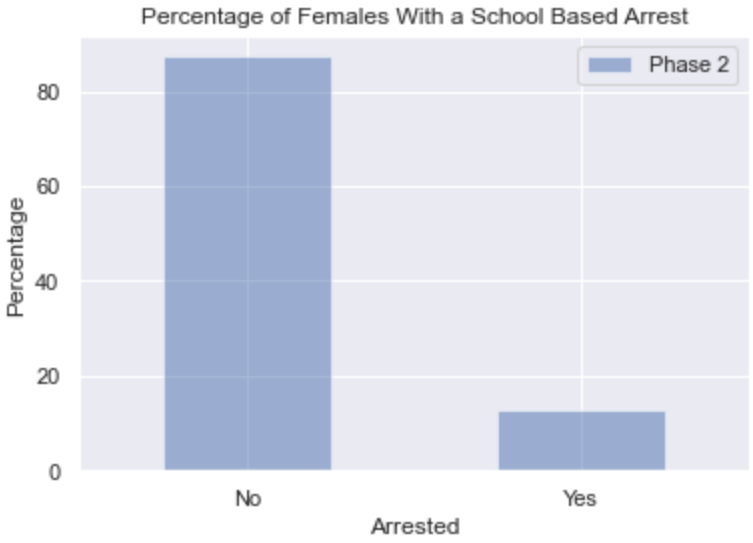
In [713…

```
school_arrest_female_count = phase2[phase2['9'] == 'Female'].groupby('30').size()
print('School Based Arrest - Female',school_arrest_female_count)
```

```
School Based Arrest - Female 30
No     69
Yes    10
dtype: int64
```

In [714…

```
school_arrest_female.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of Females With a School Based Arrest')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```



Percentage of Males With a School Based Arrest

In [715…

```
school_arrest_male = phase2[phase2['9'] == 'Male'].groupby('30').size()
school_arrest_male = (school_arrest_male / school_arrest_male.sum()) *100
print('School Based Arrest - Male',school_arrest_male)
```

```
School Based Arrest - Male 30
No     82.022472
Yes    17.977528
dtype: float64
```

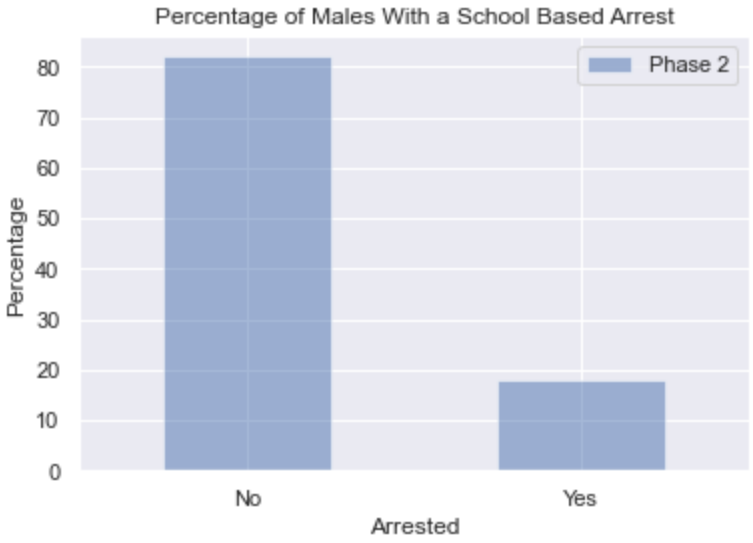
In [716…

```
school_arrest_male_count = phase2[phase2['9'] == 'Male'].groupby('30').size()
print('School Based Arrest - Male',school_arrest_male_count)
```

```
School Based Arrest - Male 30
No     73
Yes    16
dtype: int64
```

In [717…

```
school_arrest_male.plot(kind='bar', legend=True, alpha=.5)
plt.xlabel('Arrested')
plt.ylabel('Percentage')
plt.title('Percentage of Males With a School Based Arrest')
L=plt.legend()
L.get_texts()[0].set_text('Phase 2')
plt.xticks(rotation = 0)
plt.show()
```


Percentage of Males With a School Based Arrest
Phase 2
80
70
60
50
40
30
20
10
0
Percentage
No
Yes
Arrested