UNIVERSIDAD AUTÓNOMA DE BAJA CALIFORNIA
Facultad de Ingeniería, Arquitectura y Diseño

Ingeniero en Software y Tecnologías Emergentes

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Grupo:
932

Practica #2

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Procedimiento

```python
import pandas as pd
import matplotlib.pyplot as plt

data_dict = {
    'year': [1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638],
    'boys': [5218, 4858, 4422, 4994, 5158, 5035, 5106, 4917, 4703, 5359],
    'girls': [4683, 4457, 4102, 4590, 4841, 4912, 4928, 4783, 4661, 5473]
}

df = pd.DataFrame(data_dict)

plt.figure(figsize=(12, 6))
plt.plot(df['year'], df['boys'], label='Boys')
plt.plot(df['year'], df['girls'], label='Girls')
plt.xlabel('Year')
plt.ylabel('Births')
plt.title('Births of Boys and Girls Over the Years')
plt.legend()
plt.show()

df['total_births'] = df['boys'] + df['girls']
df['prop_boys'] = df['boys'] / df['total_births']
df['prop_girls'] = df['girls'] / df['total_births']
df['comparison'] = df['prop_boys'] > df['prop_girls']

print(df)
```

```
   year  boys  girls  total_births  prop_boys  prop_girls  comparison
0  1629  5218   4683          9901   0.527017    0.472983        True
1  1630  4858   4457          9315   0.521524    0.478476        True
2  1631  4422   4102          8524   0.518771    0.481229        True
3  1632  4994   4590          9584   0.521077    0.478923        True
4  1633  5158   4841          9999   0.515852    0.484148        True
5  1634  5035   4912          9947   0.506183    0.493817        True
6  1635  5106   4928         10034   0.508870    0.491130        True
7  1636  4917   4783          9700   0.506907    0.493093        True
8  1637  4703   4661          9364   0.502243    0.497757        True
9  1638  5359   5473         10832   0.494738    0.505262       False
```