Importar librerías

```
import pandas as pd
from google.colab import files
import matplotlib.pyplot as plt
```

Subir archivo csv

```
file=files.upload()
```

Choose Files No file chosen Upload widget is only available when the cell has been executed in the current browser session. Please rerun this cell to enable.

```
Saving macroplastics-in-ocean.csv to macroplastics-in-ocean.csv
Saving microplastics-in-ocean.csv to microplastics-in-ocean.csv
```

Leer Dataset

```
df1=pd.read_csv("macroplastics-in-ocean.csv")
df2=pd.read_csv("microplastics-in-ocean.csv")
```

Mostrar encabezados del dataset

```
df1.head()
```

	Entity	Code	Year	Accumulated ocean plastic: Macroplastics (>0.5cm)
0	Emissions growth to 2050	NaN	1950	0
1	Emissions growth to 2050	NaN	1951	400
2	Emissions growth to 2050	NaN	1952	600
3	Emissions growth to 2050	NaN	1953	1000
4	Emissions growth to 2050	NaN	1954	1300

```
df2.head()
```

	Entity	Code	Year	Accumulated ocean plastic: Microplastics (<0.5cm)
0	Emissions growth to 2050	NaN	1950	0
1	Emissions growth to 2050	NaN	1951	0
2	Emissions growth to 2050	NaN	1952	0
3	Emissions growth to 2050	NaN	1953	0

```
new_df1=df1[["Entity","Year","Accumulated ocean plastic: Macroplastics (>0.5cm)"]]
new_df2=df2[["Entity","Year","Accumulated ocean plastic: Microplastics (<0.5cm)"]]
```

Obtener información del dataset

```
new_df1.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 303 entries, 0 to 302
Data columns (total 3 columns):
 #   Column                                            Non-Null Count  Dtype 
---  ------                                            --------------  ----- 
 0   Entity                                            303 non-null    object
 1   Year                                              303 non-null    int64 
 2   Accumulated ocean plastic: Macroplastics (>0.5cm)  303 non-null    int64 
dtypes: int64(2), object(1)
memory usage: 7.2+ KB
```

```
new_df2.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 303 entries, 0 to 302
Data columns (total 3 columns):
 #   Column                                            Non-Null Count  Dtype 
---  ------                                            --------------  ----- 
 0   Entity                                            303 non-null    object
 1   Year                                              303 non-null    int64 
 2   Accumulated ocean plastic: Microplastics (<0.5cm)  303 non-null    int64 
dtypes: int64(2), object(1)
memory usage: 7.2+ KB
```

Verificar que no haya datos faltantes

```
new_df1.isnull().values.any()
new_df2.isnull().values.any()
```

```
False
```

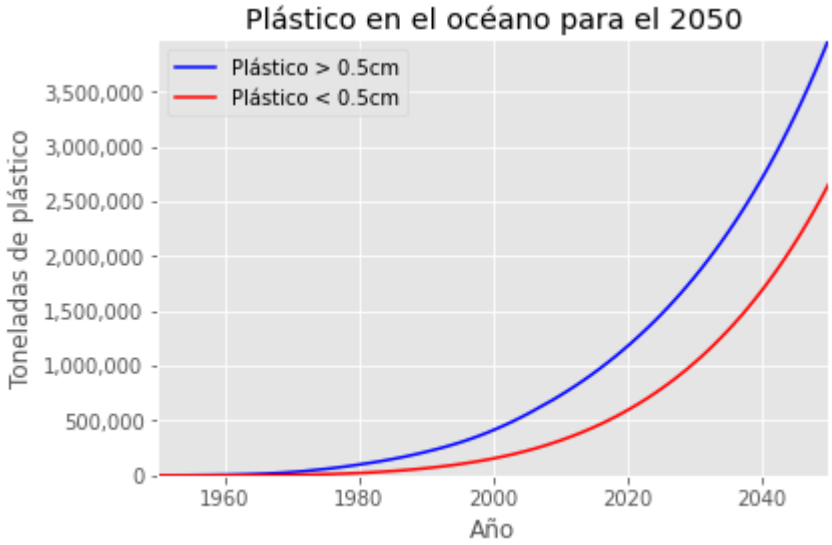
Recortar dataset

```
new_df_1=new_df1[new_df1.Entity=="Emissions growth to 2050"]
new_df_2=new_df2[new_df2.Entity=="Emissions growth to 2050"]
```

Graficar datos

```
plt.style.use("ggplot")
fig,ax=plt.subplots()
ax.plot(new_df_1["Year"],new_df_1["Accumulated ocean plastic: Macroplastics (>0.5cm)"],color=
ax.plot(new_df_2["Year"],new_df_2["Accumulated ocean plastic: Microplastics (<0.5cm)"],color=
ax.set_title("Plástico en el océano para el 2050")
ax.legend()
ax.set_xlabel("Año")
ax.set_ylabel("Toneladas de plástico")
ax.set_xlim(new_df_1["Year"].min(),new_df_1["Year"].max())
ax.set_ylim([0,new_df_1["Accumulated ocean plastic: Macroplastics (>0.5cm)"].max()])
valores_con_comas = plt.gca().get_yticks()
plt.gca().set_yticklabels(['{:,.0f}'.format(x) for x in valores_con_comas])
```

```
[Text(0, 0, '0'),
 Text(0, 0, '500,000'),
 Text(0, 0, '1,000,000'),
 Text(0, 0, '1,500,000'),
 Text(0, 0, '2,000,000'),
 Text(0, 0, '2,500,000'),
 Text(0, 0, '3,000,000'),
 Text(0, 0, '3,500,000'),
 Text(0, 0, '4,000,000')]
```




```
suma=new_df_1["Accumulated ocean plastic: Macroplastics (>0.5cm)"].max()+new_df_2["Accumulate
```

```
suma
```

```
6624600
```