Task no 1

Task 1 Create a bar chart or histogram to visualize the distribution of a categorical or continuous variable, such as the distribution of ages or genders in a population.

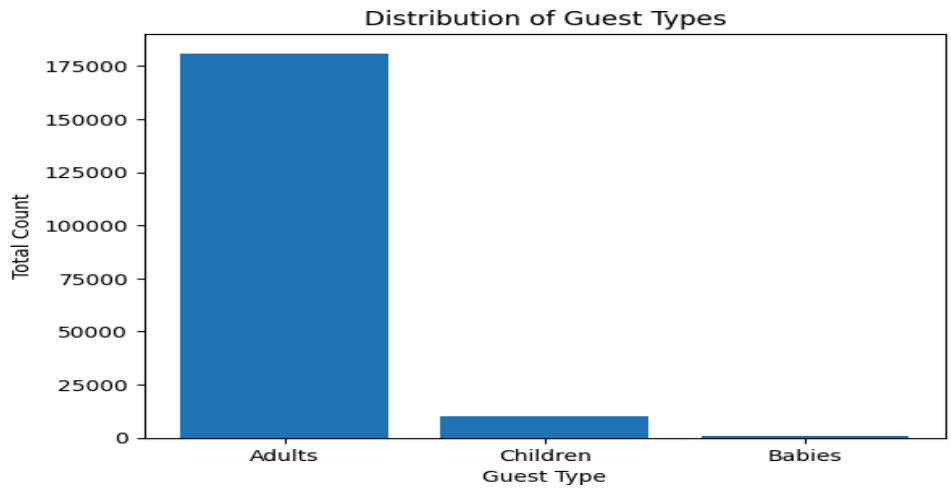
```
import numpy as np
import pandas as pd
data=pd.read_csv('/content/hotel dataset.csv')
data
```

	hotel	is_canceled	lead_time	arrival_date_year	arrival_date_month	arrival_date_week_number	arrival_date_day_o
0	Resort Hotel	0	342	2015	July	27	
1	Resort Hotel	0	737	2015	July	27	
2	Resort Hotel	0	7	2015	July	27	

```
import matplotlib.pyplot as plt

# Sum of guest types
guest_counts = {
    'Adults': data['adults'].sum(),
    'Children': data['children'].sum(),
    'Babies': data['babies'].sum()
}

# Bar chart
plt.figure()
plt.bar(guest_counts.keys(), guest_counts.values())
plt.xlabel('Guest Type')
plt.ylabel('Total Count')
plt.title('Distribution of Guest Types')
plt.show()
```



```
plt.figure()
plt.hist(data['lead_time'], bins=30)
plt.xlabel('Lead Time (days)')
plt.ylabel('Number of Bookings')
plt.title('Distribution of Lead Time')
plt.show()
```