

```

import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
from google.colab import files
import uuid

# Membaca file CSV
path = ('/content/hotel_booking.csv')
data = pd.read_csv(path)

# Menampilkan 5 baris pertama untuk memeriksa data
print("5 Baris Pertama dari Dataset (Sebelum Pra-pemrosesan):")
print(data.head()) # Corrected: Using 'data' instead of 'df'

→ 5 Baris Pertama dari Dataset (Sebelum Pra-pemrosesan):
    hotel is_canceled lead_time arrival_date_year arrival_date_month \
0  Resort Hotel      0.0      342.0        2015.0          July
1  Resort Hotel      0.0      737.0        2015.0          July
2  Resort Hotel      0.0       7.0        2015.0          July
3  Resort Hotel      0.0      13.0        2015.0          July
4  Resort Hotel      0.0      14.0        2015.0          July

    arrival_date_week_number arrival_date_day_of_month \
0                  27.0                 1.0
1                  27.0                 1.0
2                  27.0                 1.0
3                  27.0                 1.0
4                  27.0                 1.0

    stays_in_weekend_nights stays_in_week_nights adults ... customer_type \
0                  0.0                0.0     2.0 ... Transient
1                  0.0                0.0     2.0 ... Transient
2                  0.0                1.0     1.0 ... Transient
3                  0.0                1.0     1.0 ... Transient
4                  0.0                2.0     2.0 ... Transient

    adr required_car_parking_spaces total_of_special_requests \
0   0.0                      0.0                  0.0
1   0.0                      0.0                  0.0
2  75.0                      0.0                  0.0
3  75.0                      0.0                  0.0
4  98.0                      0.0                  1.0

    reservation_status reservation_status_date           name \
0  Check-Out            2015-07-01  Ernest Barnes
1  Check-Out            2015-07-01  Andrea Baker
2  Check-Out            2015-07-02 Rebecca Parker
3  Check-Out            2015-07-02 Laura Murray
4  Check-Out            2015-07-03 Linda Hines

    email phone-number credit_card
0 Ernest.Barnes31@outlook.com 669-792-1661 ****-****4322
1 Andrea.Baker94@aol.com 858-637-6955 ****-****9157
2 Rebecca.Parker@comcast.net 652-885-2745 ****-****3734
3 Laura.M@gmail.com 364-656-8427 ****-****5677
4 LHines@verizon.com 713-226-5883 ****-****5498

```

[5 rows x 36 columns]

```

# Menampilkan informasi dataset
print("\nInformasi Dataset (Sebelum Pra-pemrosesan):")
print(data.info())

```

```

→ Informasi Dataset (Sebelum Pra-pemrosesan):
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 89656 entries, 0 to 89656
Data columns (total 36 columns):
 #   Column           Non-Null Count  Dtype  
--- 
 0   hotel            89656 non-null   object 
 1   is_canceled      89655 non-null   float64
 2   lead_time         89655 non-null   float64
 3   arrival_date_year 89655 non-null   float64
 4   arrival_date_month 89655 non-null   object 
 5   arrival_date_week_number 89655 non-null   float64
 6   arrival_date_day_of_month 89655 non-null   float64
 7   stays_in_weekend_nights 89655 non-null   float64
 8   stays_in_week_nights 89655 non-null   float64
 9   adults            89655 non-null   float64
 10  children          89651 non-null   float64
 11  babies             89655 non-null   float64
 12  meal               89655 non-null   object 

```

```

13 country           89168 non-null object
14 market_segment    89655 non-null object
15 distribution_channel 89655 non-null object
16 is_repeated_guest 89655 non-null float64
17 previous_cancellations 89655 non-null float64
18 previous_bookings_not_canceled 89655 non-null float64
19 reserved_room_type 89655 non-null object
20 assigned_room_type 89655 non-null object
21 booking_changes    89655 non-null float64
22 deposit_type       89655 non-null object
23 agent              76235 non-null float64
24 company             5390 non-null float64
25 days_in_waiting_list 89655 non-null float64
26 customer_type       89655 non-null object
27 adr                89655 non-null float64
28 required_car_parking_spaces 89655 non-null float64
29 total_of_special_requests 89655 non-null float64
30 reservation_status   89655 non-null object
31 reservation_status_date 89655 non-null object
32 name               89655 non-null object
33 email               89655 non-null object
34 phone-number        89655 non-null object
35 credit_card         89655 non-null object
dtypes: float64(20), object(16)
memory usage: 24.6+ MB
None

```

```

# Menangani Missing Values
print("\nJumlah Nilai yang Hilang per Kolom (Sebelum):")
# Menggunakan 'data' alih-alih 'df'
print(data.isnull().sum())

```

⤵

```

Jumlah Nilai yang Hilang per Kolom (Sebelum):
hotel                      0
is_canceled                 1
lead_time                   1
arrival_date_year            1
arrival_date_month           1
arrival_date_week_number     1
arrival_date_day_of_month    1
stays_in_weekend_nights      1
stays_in_week_nights          1
adults                       1
children                     5
babies                        1
meal                          1
country                      488
market_segment                 1
distribution_channel           1
is_repeated_guest              1
previous_cancellations        1
previous_bookings_not_canceled 1
reserved_room_type             1
assigned_room_type              1
booking_changes                  1
deposit_type                   1
agent                         13421
company                        84266
days_in_waiting_list            1
customer_type                  1
adr                            1
required_car_parking_spaces    1
total_of_special_requests       1
reservation_status              1
reservation_status_date        1
name                           1
email                          1
phone-number                   1
credit_card                     1
dtype: int64

```

```

# Mengisi missing values
data['children'].fillna(0, inplace=True) # Mengisi NaN di 'children' dengan 0
data['country'].fillna('Unknown', inplace=True) # Mengisi NaN di 'country' dengan 'Unknown'
data['agent'].fillna(0, inplace=True) # Mengisi NaN di 'agent' dengan 0
data['company'].fillna(0, inplace=True) # Mengisi NaN di 'company' dengan 0

```

⤵ <ipython-input-6-b0271925e803>:2: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained assignment. The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting

```

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)
data['children'].fillna(0, inplace=True) # Mengisi NaN di 'children' dengan 0

```

```
<ipython-input-6-b0271925e803>:3: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained ass:
The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting
```

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)

```
data['country'].fillna('Unknown', inplace=True) # Mengisi NaN di 'country' dengan 'Unknown'
```

```
<ipython-input-6-b0271925e803>:4: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained ass:
The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting
```

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)

```
data['agent'].fillna(0, inplace=True) # Mengisi NaN di 'agent' dengan 0
```

```
<ipython-input-6-b0271925e803>:5: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained ass:
The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting
```

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)

```
data['company'].fillna(0, inplace=True) # Mengisi NaN di 'company' dengan 0
```

```
# Memeriksa kembali missing values setelah pengisian
print("\nJumlah Nilai yang Hilang per Kolom (Setelah Pengisian):")
print(data.isnull().sum())
```

```
Jumlah Nilai yang Hilang per Kolom (Setelah Pengisian):
hôtel          0
is_canceled    1
lead_time       1
arrival_date_year   1
arrival_date_month  1
arrival_date_week_number 1
arrival_date_day_of_month 1
stays_in_weekend_nights 1
stays_in_week_nights   1
adults          1
children         0
babies           1
meal             1
country          0
market_segment    1
distribution_channel 1
is_repeated_guest 1
previous_cancellations 1
previous_bookings_not_canceled 1
reserved_room_type 1
assigned_room_type 1
booking_changes    1
deposit_type      1
agent            0
company          0
days_in_waiting_list 1
customer_type     1
adr              1
required_car_parking_spaces 1
total_of_special_requests 1
reservation_status 1
reservation_status_date 1
name             1
email            1
phone-number     1
credit_card      1
dtype: int64
```

```
# 2. Menangani Nilai yang Tidak Sesuai
```

```
# Memastikan 'children', 'babies', dan 'adults' tidak negatif
data['children'] = data['children'].apply(lambda x: max(0, x))
data['babies'] = data['babies'].apply(lambda x: max(0, x))
data['adults'] = data['adults'].apply(lambda x: max(0, x))
```

```
# Memastikan 'adr' (Average Daily Rate) tidak negatif
data['adr'] = data['adr'].apply(lambda x: max(0, x))
```

```
# Memeriksa apakah ada baris dengan 'adults', 'children', dan 'babies' semuanya 0
```

```
invalid_guests = data[(data['adults'] == 0) & (data['children'] == 0) & (data['babies'] == 0)]
```

```
if not invalid_guests.empty:
```

```
    print(f"\nDitemukan {len(invalid_guests)} baris dengan jumlah tamu tidak valid (adults, children, dan babies = 0). Menghapus baris ini")
    data = data[~((data['adults'] == 0) & (data['children'] == 0) & (data['babies'] == 0))]
```



Ditemukan 78 baris dengan jumlah tamu tidak valid (adults, children, dan babies = 0). Menghapus baris ini.

```
# Memastikan tipe data yang sesuai
data['children'] = data['children'].astype(int) # Changed df to data
data['babies'] = data['babies'].astype(int) # Changed df to data
data['adults'] = data['adults'].astype(int) # Changed df to data
data['reservation_status_date'] = pd.to_datetime(data['reservation_status_date']) # Changed df to data
```

```
# 3. Menghapus Duplikasi Data
print("\nJumlah Baris Duplikat (Sebelum):", data.duplicated().sum())
data = data.drop_duplicates()
print("Jumlah Baris Duplikat (Setelah):", data.duplicated().sum())
```



Jumlah Baris Duplikat (Sebelum): 0
Jumlah Baris Duplikat (Setelah): 0

```
# Menampilkan informasi dataset setelah pra-pemrosesan
print("\nInformasi Dataset (Setelah Pra-pemrosesan):")
# Mengganti 'df' dengan 'data'
print(data.info())
```



Informasi Dataset (Setelah Pra-pemrosesan):

#	Column	Non-Null Count	Dtype
0	hotel	89578	non-null object
1	is_canceled	89578	non-null float64
2	lead_time	89578	non-null float64
3	arrival_date_year	89578	non-null float64
4	arrival_date_month	89578	non-null object
5	arrival_date_week_number	89578	non-null float64
6	arrival_date_day_of_month	89578	non-null float64
7	stays_in_weekend_nights	89578	non-null float64
8	stays_in_week_nights	89578	non-null float64
9	adults	89578	non-null int64
10	children	89578	non-null int64
11	babies	89578	non-null int64
12	meal	89578	non-null object
13	country	89578	non-null object
14	market_segment	89578	non-null object
15	distribution_channel	89578	non-null object
16	is_repeated_guest	89578	non-null float64
17	previous_cancellations	89578	non-null float64
18	previous_bookings_not_canceled	89578	non-null float64
19	reserved_room_type	89578	non-null object
20	assigned_room_type	89578	non-null object
21	booking_changes	89578	non-null float64
22	deposit_type	89578	non-null object
23	agent	89578	non-null float64
24	company	89578	non-null float64
25	days_in_waiting_list	89578	non-null float64
26	customer_type	89578	non-null object
27	adr	89578	non-null float64
28	required_car_parking_spaces	89578	non-null float64
29	total_of_special_requests	89578	non-null float64
30	reservation_status	89578	non-null object
31	reservation_status_date	89578	non-null datetime64[ns]
32	name	89578	non-null object
33	email	89578	non-null object
34	phone-number	89578	non-null object
35	credit_card	89578	non-null object

dtypes: datetime64[ns](1), float64(17), int64(3), object(15)
memory usage: 25.3+ MB
None

```
# Analisis 1: Distribusi Pembatalan
print("\nDistribusi Pembatalan:")
cancel_counts = data['is_canceled'].value_counts() # Changed df to data
print(cancel_counts)
```



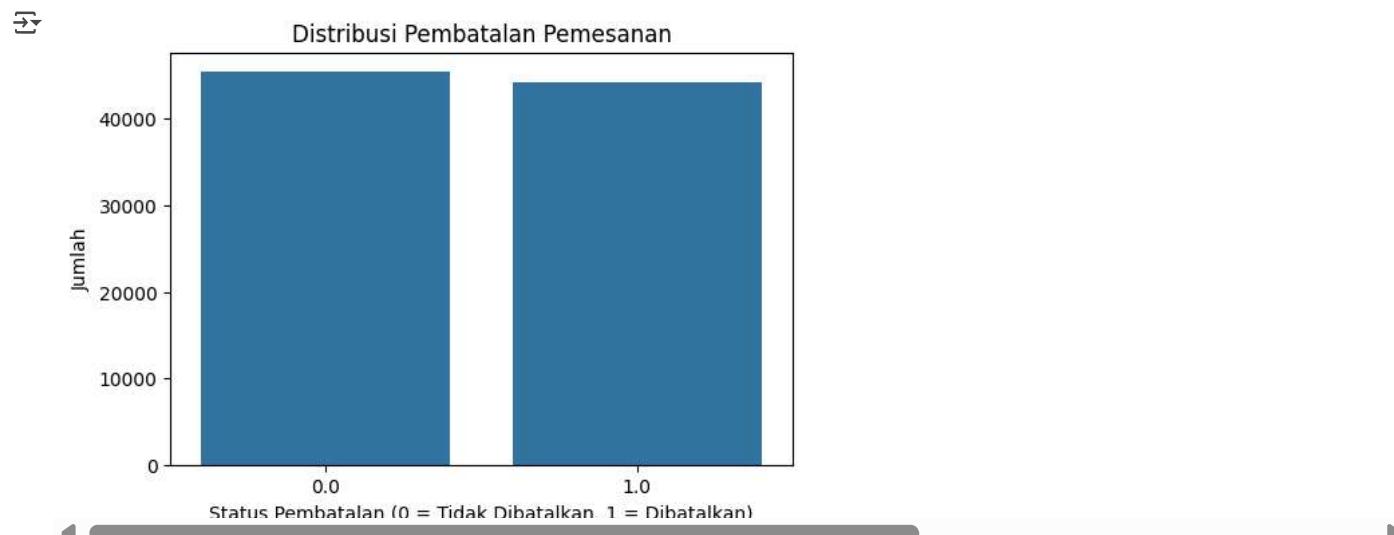
Distribusi Pembatalan:

is_canceled	count
0.0	45416
1.0	44162

Name: count, dtype: int64

```
# Visualisasi distribusi pembatalan
plt.figure(figsize=(6, 4))
```

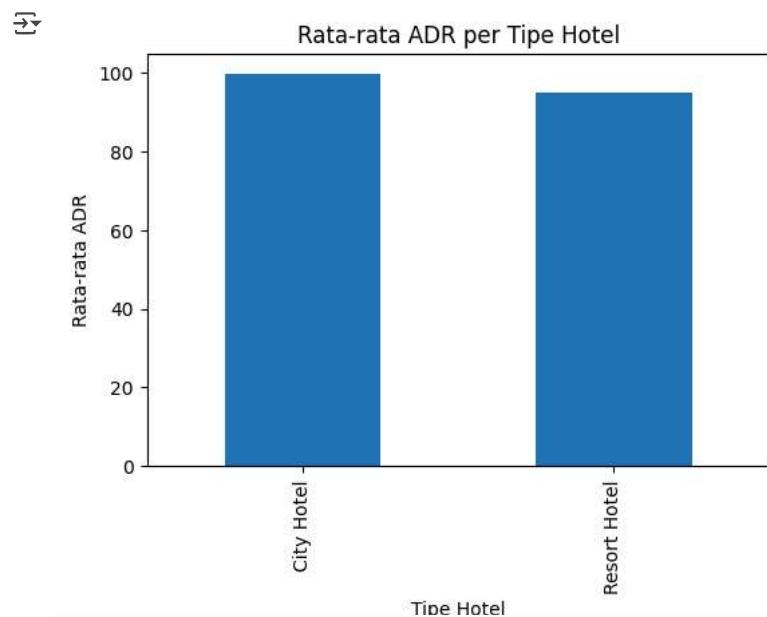
```
sns.countplot(x='is_canceled', data=data) # Changed df to data
plt.title('Distribusi Pembatalan Pemesanan')
plt.xlabel('Status Pembatalan (0 = Tidak Dibatalkan, 1 = Dibatalkan)')
plt.ylabel('Jumlah')
plt.savefig('cancellation_distribution.png')
plt.show()
```



```
# Analisis 2: Rata-rata ADR per Tipe Hotel
print("\nRata-rata ADR per Tipe Hotel:")
adr_by_hotel = data.groupby('hotel')['adr'].mean() # Mengganti 'df' dengan 'data'
print(adr_by_hotel)
```

```
Rata-rata ADR per Tipe Hotel:
hotel
City Hotel      99.827936
Resort Hotel    94.983213
Name: adr, dtype: float64
```

```
# Visualisasi rata-rata ADR per tipe hotel
plt.figure(figsize=(6, 4))
adr_by_hotel.plot(kind='bar')
plt.title('Rata-rata ADR per Tipe Hotel')
plt.xlabel('Tipe Hotel')
plt.ylabel('Rata-rata ADR')
plt.savefig('adr_by_hotel.png')
plt.show()
```



```
# Analisis 3: Distribusi Tipe Pelanggan
print("\nDistribusi Tipe Pelanggan:")
# Mengganti 'df' dengan 'data'
customer_type_counts = data['customer_type'].value_counts()
print(customer_type_counts)
```

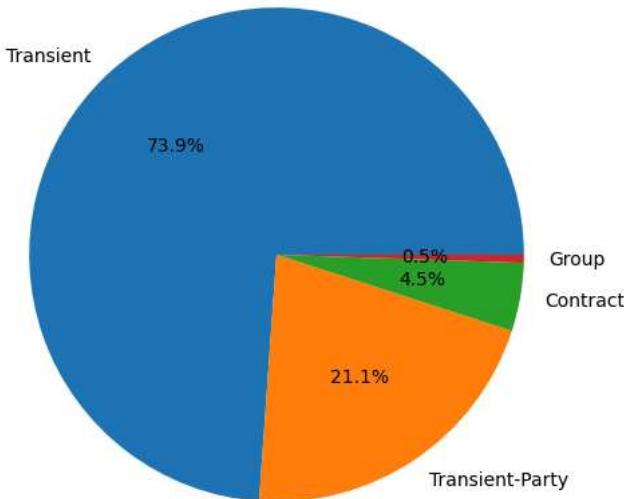


```
Distribusi Tipe Pelanggan:
customer_type
Transient      66176
Transient-Party 18932
Contract        3998
Group           472
Name: count, dtype: int64
```

```
# Visualisasi distribusi tipe pelanggan
plt.figure(figsize=(8, 6))
customer_type_counts.plot(kind='pie', autopct='%1.1f%%')
plt.title('Distribusi Tipe Pelanggan')
plt.ylabel('')
plt.savefig('customer_type_distribution.png')
plt.show()
```



Distribusi Tipe Pelanggan



```
# Analisis 4: Jumlah Pemesanan per Bulan
print("\nJumlah Pemesanan per Bulan:")
data['arrival_date_month'] = pd.Categorical(data['arrival_date_month'], # Changed df to data
                                             categories=['January', 'February', 'March', 'April', 'May', 'June',
                                                         'July', 'August', 'September', 'October', 'November', 'December'],
                                             ordered=True)
monthly_bookings = data['arrival_date_month'].value_counts().sort_index() # Changed df to data
print(monthly_bookings)
```

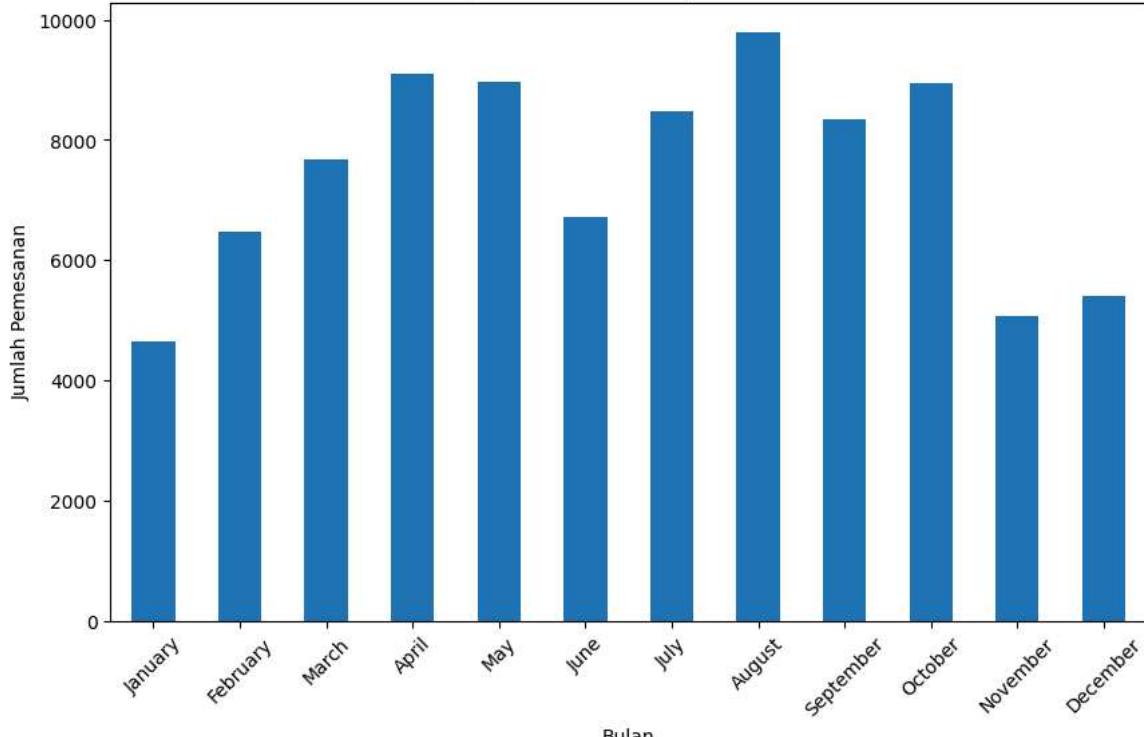


```
Jumlah Pemesanan per Bulan:
arrival_date_month
January      4638
February    6469
March       7682
April       9099
May        8962
June       6721
July       8471
August     9800
September  8333
October    8937
November   5065
December   5401
Name: count, dtype: int64
```

```
# Visualisasi jumlah pemesanan per bulan
plt.figure(figsize=(10, 6))
monthly_bookings.plot(kind='bar')
plt.title('Jumlah Pemesanan per Bulan')
plt.xlabel('Bulan')
plt.ylabel('Jumlah Pemesanan')
plt.xticks(rotation=45)
plt.savefig('monthly_bookings.png')
plt.show()
```



Jumlah Pemesanan per Bulan



```

import pandas as pd
import numpy as np # Import numpy to check for inf

# Membaca file CSV
# Change the path to the correct file name
path = '/content/hotel_booking.csv'
data = pd.read_csv(path)

# Mengisi NaN
data['country'].fillna('Unknown', inplace=True)
data['agent'].fillna(0, inplace=True)
data['company'].fillna(0, inplace=True)
data['children'].fillna(0, inplace=True) # Pastikan children diisi NaN sebelum diubah ke int

# Debugging: Check for NaN/inf before casting
print(f"NaN values in 'children' before casting: {data['children'].isnull().sum()}")
print(f"Inf values in 'children' before casting: {np.isinf(data['children']).sum()}")

# Mengubah tipe data
# Use errors='coerce' initially to see if conversion fails and results in NaN,
# then fill any new NaNs created by coercion.
# Or, try converting to a float first if the original data might be float with NaNs.

# Option 1: Convert to float first if original data is float with NaNs
# data['children'] = data['children'].astype(float) # Ensure it's float first if coming from CSV potentially as float with NaNs
# data['children'].fillna(0, inplace=True) # Fill again just in case (redundant if fillna above worked, but safe)
# data['children'] = data['children'].astype(int)

# Option 2: Use errors='coerce' (less ideal as it hides the original issue)
# data['children'] = pd.to_numeric(data['children'], errors='coerce')
# data['children'].fillna(0, inplace=True) # Fill any NaNs created by coercion
# data['children'] = data['children'].astype(int) # Now convert to int

# Let's stick to the original intent and re-verify the fillna logic
# data['children'] = data['children'].astype(int) # Original line causing error

# A safer approach might be to ensure the column is numeric first, handle NaNs, then cast to int
data['children'] = pd.to_numeric(data['children'], errors='coerce') # Ensure it's numeric, turn unparseable values into NaN
data['children'].fillna(0, inplace=True) # Fill any NaNs (original ones and those from coerce)
# Check again after filling from coerce
print(f"NaN values in 'children' after to_numeric and fillna: {data['children'].isnull().sum()}")
# Now, convert to int. If there are still non-integer-like floats, this might still error
# Or, if the original data type was problematic even for pd.to_numeric initially, though less likely.
# Let's assume fillna(0) on the numeric column should make it safe for int conversion.
data['children'] = data['children'].astype(int)

data['babies'] = pd.to_numeric(data['babies'], errors='coerce')

```

```

data['babies'].fillna(0, inplace=True)
data['babies'] = data['babies'].astype(int)

data['adults'] = pd.to_numeric(data['adults'], errors='coerce')
data['adults'].fillna(0, inplace=True)
data['adults'] = data['adults'].astype(int)

# Ensure reservation_status_date is also handled safely
data['reservation_status_date'] = pd.to_datetime(data['reservation_status_date'], errors='coerce')
# You might want to handle NaT values if errors='coerce' created them in the date column
# data['reservation_status_date'].fillna(some_default_date, inplace=True) # Example

```

Menghapus baris dengan jumlah tamu tidak valid (188 baris)

(Diasumsikan Anda telah menghapus baris di mana adults, children, dan babies = 0)

If this step is needed again after reading the data, add it here.

invalid_guests = data[(data['adults'] == 0) & (data['children'] == 0) & (data['babies'] == 0)]

if not invalid_guests.empty:

```

#     print(f"\nDitemukan {len(invalid_guests)} baris dengan jumlah tamu tidak valid (adults, children, dan babies = 0). Menghapus baris
#     data = data[~((data['adults'] == 0) & (data['children'] == 0) & (data['babies'] == 0))]
```

Menghapus duplikasi

```

data = data.drop_duplicates()

```

→ <ipython-input-26-bd3b688d4474>:10: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained assignment. The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)

```

data['country'].fillna('Unknown', inplace=True)

```

<ipython-input-26-bd3b688d4474>:11: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained assignment. The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)

```

data['agent'].fillna(0, inplace=True)

```

<ipython-input-26-bd3b688d4474>:12: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained assignment. The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)

```

data['company'].fillna(0, inplace=True)

```

<ipython-input-26-bd3b688d4474>:13: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained assignment. The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)

```

data['children'].fillna(0, inplace=True) # Pastikan children diisi NaN sebelum diubah ke int

```

<ipython-input-26-bd3b688d4474>:14: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained assignment. The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)

```

data['children'].fillna(0, inplace=True) # Fill any NaNs (original ones and those from coerce)

```

<ipython-input-26-bd3b688d4474>:15: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained assignment. The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)

```

data['babies'].fillna(0, inplace=True)

```

<ipython-input-26-bd3b688d4474>:16: FutureWarning: A value is trying to be set on a copy of a DataFrame or Series through chained assignment. The behavior will change in pandas 3.0. This inplace method will never work because the intermediate object on which we are setting

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.method({col: value}, inplace=True)' or df[col] = df[col].method(value)

```

data['adults'].fillna(0, inplace=True)

```

NaN values in 'children' before casting: 0
 Inf values in 'children' before casting: 0
 NaN values in 'children' after to_numeric and fillna: 0

Menyimpan dataset ke file CSV

```

data.to_csv('/content/el_booking_processed.csv', index=False)
print("File CSV telah disimpan sebagai: el_booking_processed.csv")

```

→ File CSV telah disimpan sebagai: el_booking_processed.csv

```
from google.colab import files

# Mengunduh file CSV
files.download('/content/el_booking_processed.csv')

print(data.info())
print(data.head())

24    company           119390 non-null float64
25  days_in_waiting_list  119390 non-null int64
26  customer_type          119390 non-null object
27      adr           119390 non-null float64
28  required_car_parking_spaces  119390 non-null int64
29  total_of_special_requests  119390 non-null int64
30  reservation_status        119390 non-null object
31  reservation_status_date   119390 non-null datetime64[ns]
32      name          119390 non-null object
33      email          119390 non-null object
34  phone-number          119390 non-null object
35  credit_card          119390 non-null object
dtypes: datetime64[ns](1), float64(3), int64(17), object(15)
memory usage: 32.8+ MB
None
      hotel  is_canceled  lead_time  arrival_date_year  arrival_date_month \
0  Resort Hotel            0       342           2015             July
1  Resort Hotel            0       737           2015             July
2  Resort Hotel            0         7           2015             July
3  Resort Hotel            0        13           2015             July
4  Resort Hotel            0        14           2015             July

  arrival_date_week_number  arrival_date_day_of_month \
0                  27                      1
1                  27                      1
2                  27                      1
3                  27                      1
4                  27                      1

  stays_in_weekend_nights  stays_in_week_nights  adults  ...  customer_type \
0                      0                      0      2  ...    Transient
1                      0                      0      2  ...    Transient
2                      0                      1      1  ...    Transient
3                      0                      1      1  ...    Transient
4                      0                      2      2  ...    Transient

      adr  required_car_parking_spaces  total_of_special_requests \
0     0.0                      0                      0
1     0.0                      0                      0
2    75.0                      0                      0
3    75.0                      0                      0
4   98.0                      0                      1

  reservation_status  reservation_status_date          name \
0    Check-Out        2015-07-01  Ernest Barnes
1    Check-Out        2015-07-01  Andrea Baker
2    Check-Out        2015-07-02  Rebecca Parker
3    Check-Out        2015-07-02  Laura Murray
4    Check-Out        2015-07-03  Linda Hines

      email  phone-number  credit_card
0  Ernest.Barnes31@outlook.com  669-792-1661  ****4322
1  Andrea.Baker94@aol.com    858-637-6955  ****9157
2  Rebecca.Parker@comcast.net  652-885-2745  ****3734
3  Laura.M@gmail.com        364-656-8427  ****5677
4  LHines@verizon.com        713-226-5883  ****5498
```

[5 rows x 36 columns]