

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

```
# Creating DataFrames
```

```
table1 = pd.read_csv("location_online.csv")
```

```
table2 = pd.read_csv("location_type.csv")
```

```
print(table1.head())
```

```
print(table2.head())
```

	location	online_order	total
0	BTM	No	802
1	BTM	Yes	1682
2	Banashankari	No	260
3	Banashankari	Yes	311
4	Banaswadi	No	208

	location	type	name
0	BTM	Buffet	15
1	BTM	Cafes	46
2	BTM	Delivery	1418
3	BTM	Desserts	110
4	BTM	Dine-out	866

```
# Merging the tables on 'location'
```

```
merged_df = pd.merge(table1, table2, on='location')
```

```
# Question 1: Do a greater number of restaurants provide online  
delivery as opposed to offline services?
```

```
online_delivery_counts = merged_df['online_order'].value_counts()
```

```
plt.figure(figsize=(6, 4))
```

```
online_delivery_counts.plot(kind='bar', color=['blue', 'orange'])
```

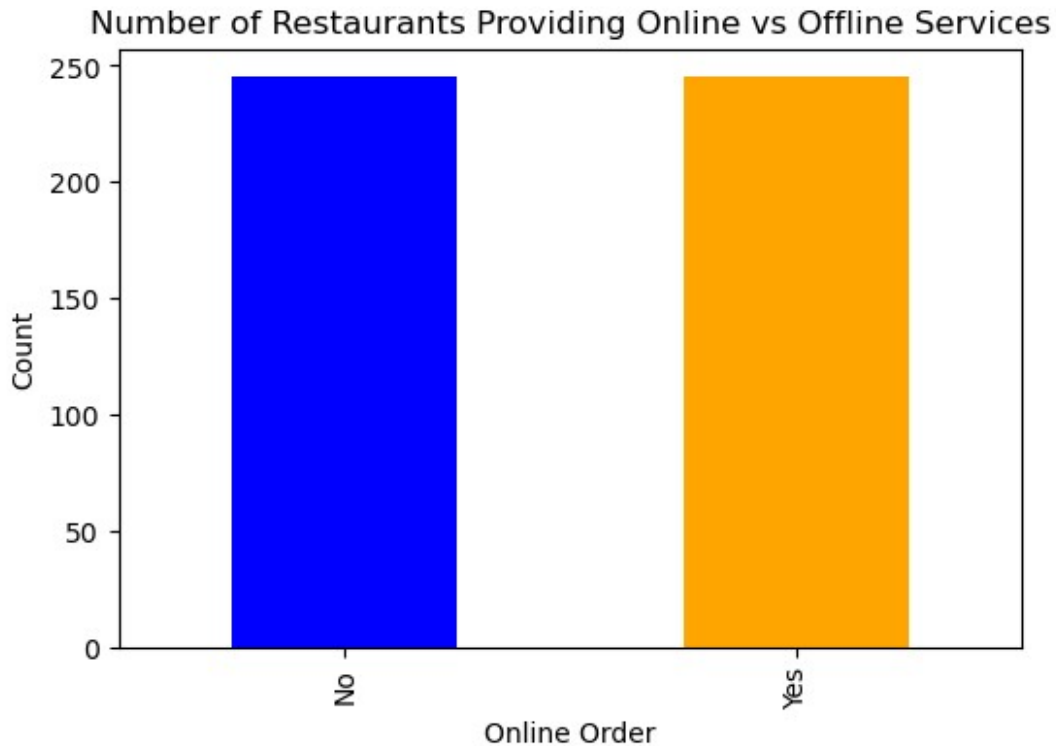
```
plt.xlabel('Online Order')
```

```
plt.ylabel('Count')
```

```
plt.title('Number of Restaurants Providing Online vs Offline  
Services')
```

```
plt.show()
```

```
print(f"Online Delivery Counts:\n{online_delivery_counts}")
```



Online Delivery Counts:

online_order

No 245

Yes 245

Name: count, dtype: int64

Question 2: Which types of restaurants are the most favored by the general public?

```
type_popularity = merged_df.groupby('type')['name'].sum()
```

```
plt.figure(figsize=(8, 6))
```

```
type_popularity.plot(kind='bar', color='green')
```

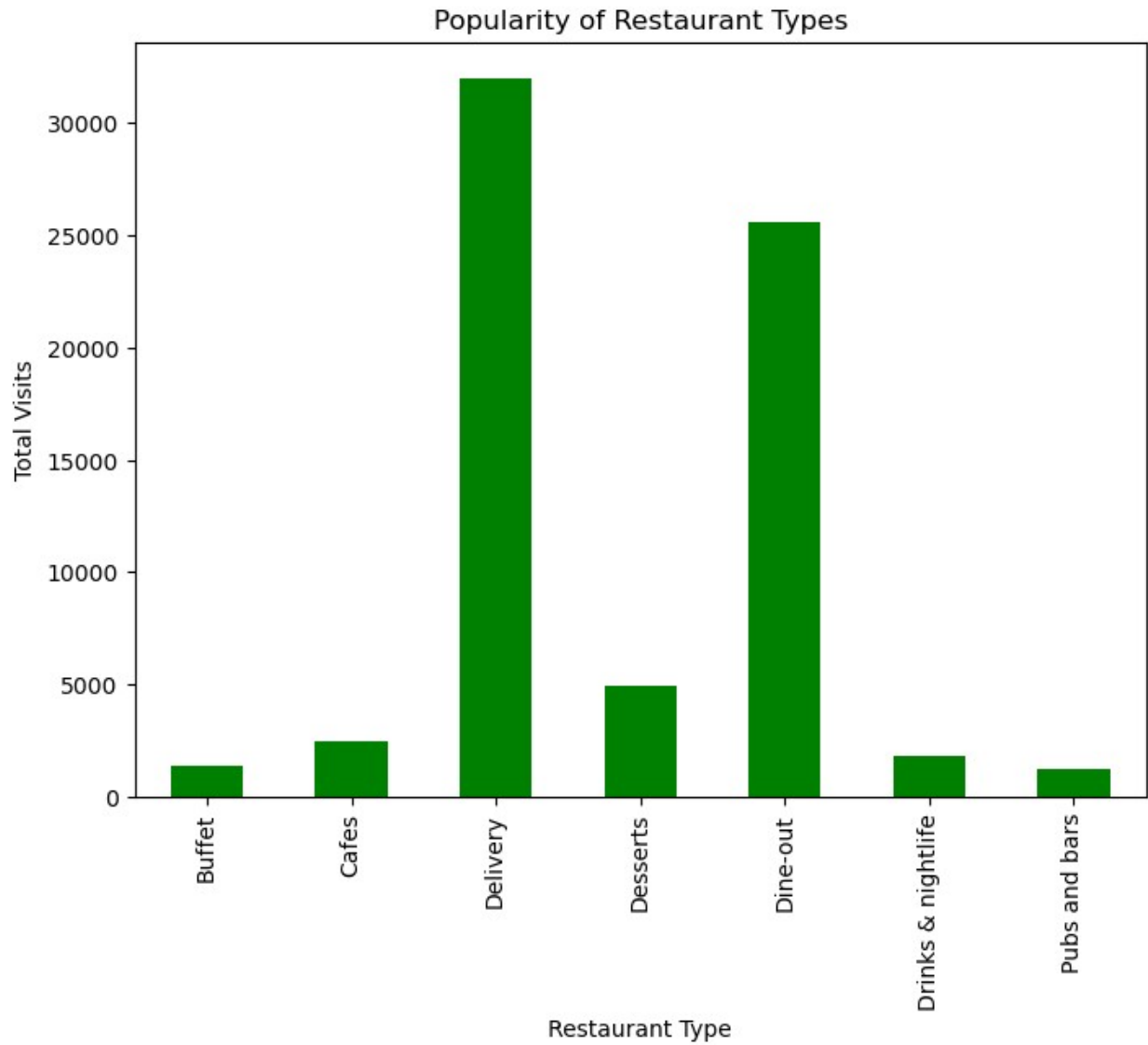
```
plt.xlabel('Restaurant Type')
```

```
plt.ylabel('Total Visits')
```

```
plt.title('Popularity of Restaurant Types')
```

```
plt.show()
```

```
print(f"Restaurant Type Popularity:\n{type_popularity}")
```



Restaurant Type Popularity:

```
type
Buffet          1338
Cafes           2476
Delivery        31990
Desserts        4904
Dine-out        25566
Drinks & nightlife 1804
Pubs and bars   1194
Name: name, dtype: int64
```

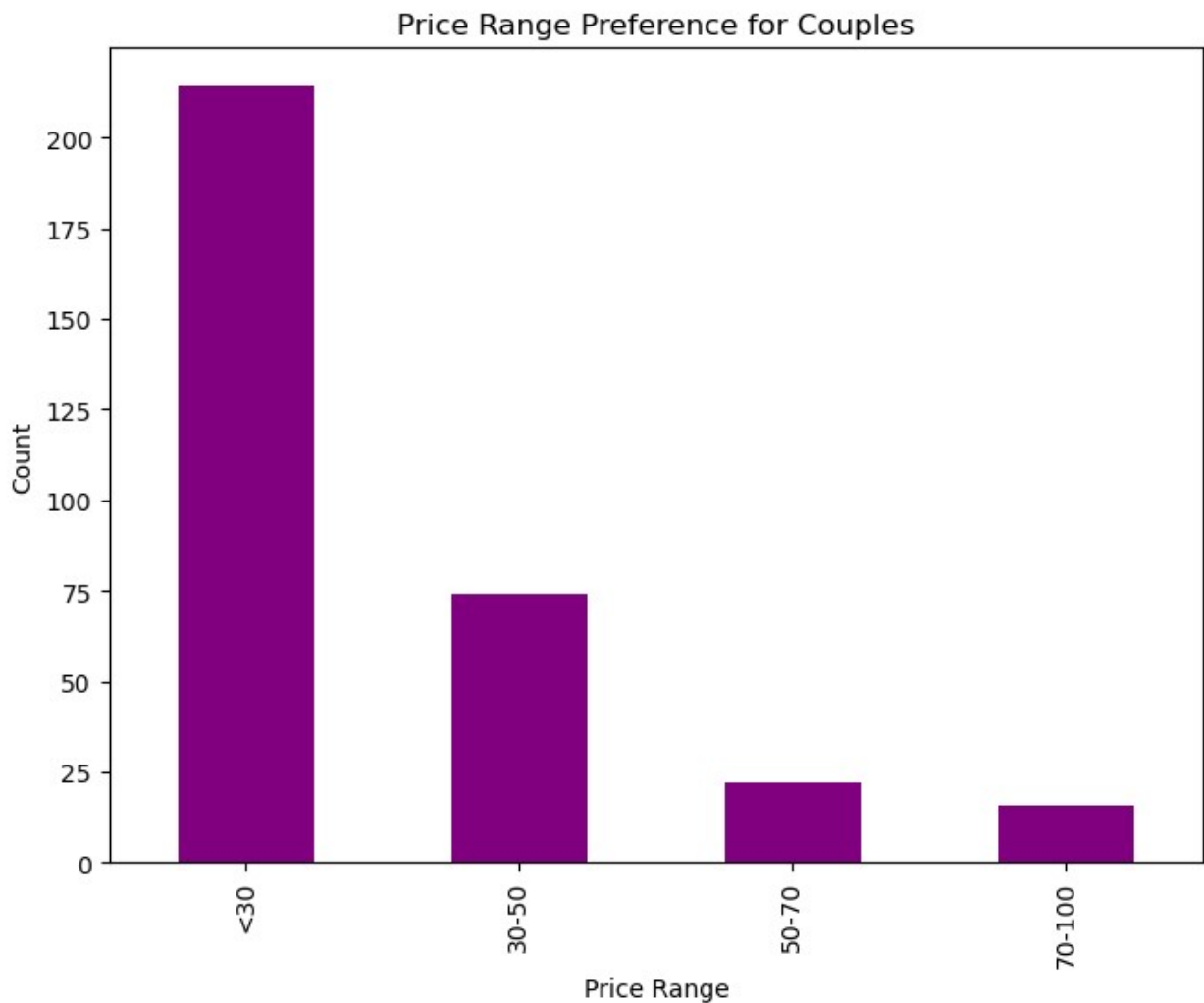
Question 3: What price range is preferred by couples for their dinner at restaurants?

Assuming price ranges are included in the table (for example purposes, we will use 'total' column)

```

price_ranges = ['<30', '30-50', '50-70', '70-100']
merged_df['price_range'] = pd.cut(merged_df['name'], bins=[0, 30, 50, 70, 100], labels=price_ranges)
price_preference = merged_df['price_range'].value_counts(sort=False)
plt.figure(figsize=(8, 6))
price_preference.plot(kind='bar', color='purple')
plt.xlabel('Price Range')
plt.ylabel('Count')
plt.title('Price Range Preference for Couples')
plt.show()
print(f"Price Range Preference:\n{price_preference}")

```



```

Price Range Preference:
price_range
<30         214
30-50        74
50-70        22

```

```
70-100      16  
Name: count, dtype: int64
```