

insights

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```

```
import pandas as pd
import numpy as np

df = pd.read_csv("diminos_data.csv")
df.head()
```

[1] ✓ 1.4s Python

	order_id	order_placed_at	order_delivered_at
0	1523111	2023-03-01 00:00:59	2023-03-01 00:18:07.443132
1	1523112	2023-03-01 00:03:59	2023-03-01 00:19:34.925241
2	1523113	2023-03-01 00:07:22	2023-03-01 00:22:28.291385
3	1523114	2023-03-01 00:07:47	2023-03-01 00:46:19.019399
4	1523115	2023-03-01 00:09:03	2023-03-01 00:25:13.619056

```
import pandas as pd
import numpy as np

# -----
# 1. Load the dataset
# -----
df = pd.read_csv("diminos_data.csv")

# Display basic info
print("Dataset Overview:")
print(df.head())
print("\n")

# -----
```

✓ 0.0s

Dataset Overview:

	order_id	order_placed_at	order_delivered_at
0	1523111	2023-03-01 00:00:59	2023-03-01 00:18:07.443132
1	1523112	2023-03-01 00:03:59	2023-03-01 00:19:34.925241
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4	1523115	2023-03-01 00:09:03	2023-03-01 00:25:13.619056

```
df = pd.read_csv("diminos_data.csv")

# Convert columns to datetime
df["order_placed_at"] = pd.to_datetime(df["order_placed_at"])
df["order_delivered_at"] = pd.to_datetime(df["order_delivered_at"])

# Calculate delivery time in minutes
df["delivery_time"] = (
    df["order_delivered_at"] - df["order_placed_at"]
).dt.total_seconds() / 60
```

✓ 0.1s

```
print("Basic Statistics for Delivery Time:")
print(df["delivery_time"].describe())
print("\n")
```

✓ 0.0s

Basic Statistics for Delivery Time:

count	15000.000000
mean	20.499389
std	96.160362
min	15.000010
25%	15.274826
50%	15.797986
75%	17.279661
max	7299.831375

Name: delivery_time, dtype: float64

```
p95 = np.percentile(df["delivery_time"], 95)

print(f"95th Percentile Delivery Time: {p95:.2f} minutes")

# Check against SLA
if p95 < 31:
    print("✓ SLA MET: 95th percentile is within 31 minutes")
else:
    print("✗ SLA VIOLATION: Risk of losing franchise")

print("\n")
```

✓ 0.0s

```
95th Percentile Delivery Time: 27.26 minutes
✓ SLA MET: 95th percentile is within 31 minutes
```

```
▷ ▾ late_orders = df[df["delivery_time"] > 31]

print(f"Total Orders: {len(df)}")
print(f"Late Orders (>31 mins): {len(late_orders)}")
print(f"Late Order Percentage: {(len(late_orders)/len(df))*100:.2f}%")

[7] ✓ 0.0s
...
Total Orders: 15000
Late Orders (>31 mins): 557
Late Order Percentage: 3.71%
```