In [3]:

```python
import pandas as pd
import json

# 1️⃣ Structured Data (Rows and Columns like Excel or Database)
structured = pd.DataFrame({
    "ID": [1, 2, 3],
    "Name": ["Asha", "Ravi", "Maya"],
    "Department": ["Sales", "IT", "HR"]
})

print("=== Structured Data ===")
display(structured)   # display() shows a nice table in Jupyter


# 2️⃣ Semi-Structured Data (JSON format)
semi_structured = [
    {"OrderID": "O1", "Customer": "Priya", "Items": [{"Product": "Pen", "Qty": 2}
    {"OrderID": "O2", "Customer": "Karan", "Items": [{"Product": "Pencil", "Qty":
]

print("\n=== Semi-Structured Data ===")
print(json.dumps(semi_structured, indent=2))


# 3️⃣ Unstructured Data (Free text — no fixed structure)
unstructured = [
    "Great service and friendly staff.",
    "Poor quality and late delivery.",
    "Average experience overall."
]

print("\n=== Unstructured Data ===")
for text in unstructured:
    print("-", text)
```

```
=== Structured Data ===
```

	ID	Name	Department
0	1	Asha	Sales
1	2	Ravi	IT
2	3	Maya	HR

```
=== Semi-Structured Data ===
[
  {
    "OrderID": "O1",
    "Customer": "Priya",
    "Items": [
      {
        "Product": "Pen",
        "Qty": 2
      },
      {
        "Product": "Book",
        "Qty": 1
      }
    ]
  },
  {
    "OrderID": "O2",
    "Customer": "Karan",
    "Items": [
      {
        "Product": "Pencil",
        "Qty": 5
      }
    ]
  }
]

=== Unstructured Data ===
- Great service and friendly staff.
- Poor quality and late delivery.
- Average experience overall.
```

In [ ]: