

QUESTION 10: Intelligent Automation

1: Introduction to Intelligent Automation

Intelligent Automation (IA) combines:

- **Automation:** Do repetitive tasks automatically
- **AI or scripts:** Add decision-making or logic

Task: Design a simple **workflow automation** (data fetch → clean → report)

Common tools: Python scripts, RPA (UiPath), Airflow, Cron jobs

2. Create mock sales data sales.csv:

Date,Product,Quantity,Price

2025-01-01,Soap,5,100

2025-01-02,Shampoo,2,250

2025-01-03,Lotion,,300

Code:

```
import pandas as pd
```

```
# Step 1: Fetch data
```

```
df = pd.read_csv('sales.csv')
```

```
# Step 2: Clean data
```

```
df_cleaned = df.dropna()
```

```
# Step 3: Create report
```

```
df_cleaned['Total'] = df_cleaned['Quantity'] * df_cleaned['Price']
```

```
summary = df_cleaned.groupby('Product')['Total'].sum()
```

```
print("Sales Summary Report:")
```

```
print(summary)
```

Step 3: Schedule this as a task (optional)

You can schedule this using:

- Windows Task Scheduler
- Python's schedule package
- Airflow (advanced)