# **Lab 3: Precision Prompting for Information Extraction**

## **Objective:**

Extract structured data from ChatGPT responses.

## **Activities:**

• Ask ChatGPT to format its responses in JSON or table format  
 • Extract structured elements like contact information, resume sections, and keywords from a paragraph

## **Example 1 – Extracting Contact Info (Table Format)**

Prompt:  
 Extract the name, email, and phone number from this paragraph and present it in a table format:  
 “Hi, I’m Rahul Mehta. You can reach me at rahul.m@gmail.com or call me at +91-9876543210.”

| Name | Email | Phone |
| --- | --- | --- |
| Rahul Mehta | rahul.m@gmail.com | +91-9876543210 |

Accuracy: ✅ 100% accurate  
 Format: ✅ Proper tabular format

## **Example 2 – Resume Section Extraction (JSON Format)**

Prompt:  
 Extract sections like Name, Education, Skills, and Experience from the text and return in JSON:  
 “I’m Ayesha Khan. I hold a Master’s in Computer Science. Skilled in Python, Java, and SQL. Previously worked at Infosys and Wipro.”

Output:

{  
 "Name": "Ayesha Khan",  
 "Education": "Master’s in Computer Science",  
 "Skills": ["Python", "Java", "SQL"],  
 "Experience": ["Infosys", "Wipro"]  
 }

Accuracy: ✅ 100% accurate  
 Format: ✅ JSON format, well-structured

## **Example 3 – Keyword Extraction from Paragraph**

Prompt:  
 Identify 5 keywords from this paragraph:  
 “Data science combines statistics, programming, and domain expertise to extract insights from data.”

Output:  
 ["Data science", "statistics", "programming", "domain expertise", "insights"]

Accuracy: ✅ Relevant keywords  
 Format: ✅ Clean list format

## **Example 4 – JSON Response with Field Constraints**

Prompt:  
 From the following bio, extract only fields: name, email, and city. Return in JSON.  
 “My name is Neha Kapoor. I’m based in Pune. Email: neha.kapoor@xyz.com. I love UX design.”

Output:

{  
 "name": "Neha Kapoor",  
 "email": "neha.kapoor@xyz.com",  
 "city": "Pune"  
 }

Accuracy: ✅ Only required fields extracted  
 Format: ✅ JSON format

## **Example 5 – Multi-Row Table Extraction from Paragraph**

Prompt:  
 Extract each work experience as a separate row in a table (with Company and Role):  
 “I worked as a Data Analyst at TCS, then moved to Amazon as a Data Engineer, and finally joined Google as an ML Specialist.”

| Company | Role |
| --- | --- |
| TCS | Data Analyst |
| Amazon | Data Engineer |
| Google | ML Specialist |

Accuracy: ✅ Matches source  
 Format: ✅ Structured table