Create a pandas DataFrame from a JSON Object with Nested Structure

1. Task Description

The task involves extracting and transforming a nested JSON object into a structured format using Python's pandas library. The objective is to normalize the hierarchical JSON data into a flat pandas DataFrame while retaining meaningful relationships between fields through proper naming conventions. The JSON object contains information about employees, including details like their skills, job titles, locations, and annual salaries. By using pandas.json_normalize, the nested structure is flattened for easy analysis and further processing.

2. Screenshot of Output

	Employee_id	Name	Annual Salary	Skills_Python	Skills_Excel
0	N101	John Doe	70000	Advanced	Intermediate
1	L402	Jane Smith	75000	Intermediate	Advanced
2	S203	Alice Johnson	40000	Beginner	Intermediate
3	T709	Michael Lee	120000	Advanced	Advanced
4	B607	Chris Brown	65000	Intermediate	Beginner

	Skills_SQL	Working_years	Working_Job-Title	Location_City
0	Beginner	2	Data Analysis	New York
1	Advanced	3	Business Intelligence	London
2	Intermediate	1	Data Entry	Sydney
3	Advanced	5	Machine Learning	Toronto
4	Intermediate	2	Data Engineering	Berlin

	Location_Country
0	USA
1	UK
2	Australia
3	Canada
4	Germany

3. Algorithm Used in Task

- **Libraries and Algorithms:**
  - **pandas:**
    - The pandas library is used for data manipulation and analysis.
    - Specifically, the json_normalize function was employed to flatten the nested JSON structure into a DataFrame.

- **json:**
    - Used for representing the nested JSON data structure.

4. Add Report in Your Task Zip File

The task report has been added to the zip file. This includes:

1. The Python script (Data Science & Machine Learning_Task_2.ipynb).
2. A text version of this report (Task_2_Report.pdf).

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