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In [11]: import os
import json

# Directory containing files
directory = "/Users/varunkumar/Downloads/employee (2)"

# Step 1: Find JSON file with 'employee' in the name
json_files = [file for file in os.listdir(directory) if "employee" in file and file.endswith(".json")]

if len(json_files) == 0:
    print("No JSON file with 'employee' in the name found in the directory.")
    exit()

json_file_path = os.path.join(directory, json_files[0])

# Step 2: Load JSON data
with open(json_file_path, 'r') as file:
    data = json.load(file)

# Print loaded JSON data (optional)
print("JSON data loaded successfully.")

# Assuming the JSON structure matches the example provided earlier
employees = data['objects']

# Displaying loaded employee data
print(f"Number of employees: {len(employees)}")
print("Details of employee with ID 8:")
for employee in employees:
    if employee['ID'] == '8':
        print(employee)
        break # Stop searching once employee with ID 8 is found
```

JSON data loaded successfully.  
Number of employees: 50  
Details of employee with ID 8:  
{'ID': '8', 'JobTitle': 'Audiologist', 'EmailAddress': 'Michaela\_Little1010@yahoo.com', 'FirstNameLastName': 'Michaela Little', 'vaccinated': 'True'}

```
In [12]: # Step 2: Storing column names
column_names = list(employees[0].keys())

# Display column names
print("Column names:", column_names)
```

Column names: ['ID', 'JobTitle', 'EmailAddress', 'FirstNameLastName', 'vaccinated']

```
In [13]: import sqlite3

# Step 3: Establishing SQLite connection and table creation
conn = sqlite3.connect('data.db')
cursor = conn.cursor()

# Create employee table
create_table_query = """
CREATE TABLE IF NOT EXISTS employee (
    ID INTEGER PRIMARY KEY,
    JobTitle TEXT,
    EmailAddress TEXT,
    FirstNameLastName TEXT,
    vaccinated TEXT
)
"""
cursor.execute(create_table_query)
conn.commit()

print("Table 'employee' created successfully in data.db")
```

Table 'employee' created successfully in data.db

```
In [14]: # Step 4: Populating data into SQLite table
insert_query = """
INSERT OR IGNORE INTO employee (ID, JobTitle, EmailAddress, FirstNameLastName, vaccinated)
VALUES (?, ?, ?, ?, ?)
"""

for emp in employees:
    emp_data = (emp['ID'], emp['JobTitle'], emp['EmailAddress'], emp['FirstNameLastName'], emp['vaccinated'])
    cursor.execute(insert_query, emp_data)

conn.commit()

print("Data inserted into 'employee' table successfully.")
```

Data inserted into 'employee' table successfully.

```
In [15]: import pandas as pd

# Step 5: Reading SQL data back into pandas and adding bonus percent
query = """
SELECT *,
CASE
    WHEN vaccinated = 'True' THEN 0.15
    ELSE 0.05
END AS bonus_percent
FROM employee
"""

df = pd.read_sql_query(query, conn)

# Export DataFrame to Excel
excel_output_path = 'employee.xlsx'
df.to_excel(excel_output_path, index=False)

print(f"DataFrame with bonus percent exported to '{excel_output_path}' successfully.")

# Close SQLite connection
conn.close()
```

DataFrame with bonus percent exported to 'employee.xlsx' successfully.

```
In [16]: import pandas as pd

# Step 1: Read the Excel file into a DataFrame
file_path = 'employee.xlsx'
df = pd.read_excel(file_path, sheet_name='Sheet1') # Adjust sheet name if different

# Step 2: Display the DataFrame (optional)
print("DataFrame from 'employee.xlsx':")
print(df)

# Step 3: Perform further operations as needed
# For example, adding a column named 'bonus percent' if not already added

# Example: Adding a column 'bonus percent' if not already present
if 'bonus percent' not in df.columns:
    # Assuming 'vaccinated' column exists and is boolean (True/False)
    df['bonus percent'] = df['vaccinated'].apply(lambda x: 0.15 if x else 0.05)

# Step 4: Export modified DataFrame back to Excel if needed
# For example:
# df.to_excel('modified_employee.xlsx', index=False)

# Step 5: Continue with further data analysis, visualization, or tasks
# For example:
# Calculate statistics, plot data, etc.
```

DataFrame from 'employee.xlsx':

	ID	JobTitle	EmailAddress	\
0	1	Designer	Leroy_Yarlett52@guentu.biz	
1	2	Webmaster	Julian_Gonzales8496@famism.biz	
2	3	Paramedic	George_Porter6363@deons.tech	
3	50	Restaurant Manager	Peyton_Hobson4407@iatim.tech	
4	4	IT Support Staff	Penny_Reynolds8665@supunk.biz	
5	5	Dentist	Gabriel_Upton1432@bungar.biz	
6	6	Bookkeeper	Rufus_Jeffery8782@mafthy.com	
7	7	Restaurant Manager	Harry_Thomas3263@guentu.biz	
8	8	Audiologist	Michaela_Little1010@yahoo.com	
9	9	Loan Officer	Mike_Tailor5085@qater.org	
10	10	Assistant Buyer	Angelina_Haines1218@liret.org	
11	11	Pharmacist	Goldie_Oakley4929@nanoff.biz	
12	12	Global Logistics Supervisor	Sylvia_Marshall15064@vetan.org	
13	13	Restaurant Manager	Mike_Vaughn8880@bulaffy.com	
14	14	Machine Operator	Melinda_Shepherd7534@ubusive.com	
15	15	Operator	Doris_Goldsmith6453@famism.biz	
16	16	Associate Professor	Chris_Neal8692@typill.biz	
17	17	Health Educator	Harry_Chester2240@tonsy.org	
18	18	Inspector	Marla_Farrant3348@deons.tech	
19	19	Fabricator	Tania_Kennedy8370@corti.com	
20	20	Retail Trainee	Bryon_Gibbons5610@corti.com	
21	21	Cash Manager	Ivette_Taylor973@extex.org	
22	22	HR Coordinator	Chadwick_Eaton1419@twace.org	
23	23	Webmaster	Chuck_Plumb9701@nickia.com	
24	24	Steward	Candace_London3099@mafthy.com	
25	25	Investment Advisor	Marvin_Wilde6902@cispeto.com	
26	26	Doctor	Barry_Taylor9508@grannar.com	
27	27	Bellman	Elijah_Harrison3622@bungar.biz	
28	28	Front Desk Coordinator	Jazmin_Mason8297@gembat.biz	
29	29	Budget Analyst	Ramon_Whinter4041@elnee.tech	
30	30	Doctor	Candace_Darcy6235@jiman.org	
31	31	Insurance Broker	Leilani_Rosell103@fuliss.net	
32	32	Software Engineer	Noemi_Miller6490@eirey.tech	
33	33	Lecturer	Alba_Carson2919@typill.biz	
34	34	Doctor	Russel_Walter1385@bungar.biz	
35	35	Design Engineer	Maia_Kennedy6742@naiker.biz	
36	36	Physician	Fred_Clifton2086@infotech44.tech	
37	37	Call Center Representative	Alexander_Kennedy1766@mafthy.com	
38	38	Systems Administrator	Naomi_Henderson4478@sheye.org	
39	39	Biologist	Hank_Howard765@liret.org	
40	40	Steward	Dorothy_Mackenzie4447@deons.tech	
41	41	Front Desk Coordinator	Elena_Gregory8402@ubusive.com	
42	42	Production Painter	Helen_Adams3473@guentu.biz	
43	43	Software Engineer	Lucas_Brooks385@typill.biz	
44	44	Cook	Angelina_Ross7491@qater.org	
45	45	Biologist	Remy_Benfield4958@kideod.biz	
46	46	IT Support Staff	Mackenzie_Neal4273@qater.org	
47	47	Associate Professor	Janelle_Parker3414@twace.org	
48	48	Treasurer	Matthew_Woodley2830@gembat.biz	
49	49	Ambulatory Nurse	Anthony_Coleman4896@nanoff.biz	

	FirstNameLastName	vaccinated	bonus_percent
0	Leroy Yarlett	False	0.05
1	Julian Gonzales	True	0.15
2	George Porter	False	0.05
3	Peyton Hobson	True	0.15
4	Penny Reynolds	False	0.05
5	Gabriel Upton	True	0.15
6	Rufus Jeffery	True	0.15
7	Harry Thomas	False	0.05
8	Michaela Little	True	0.15
9	Mike Tailor	False	0.05
10	Angelina Haines	False	0.05
11	Goldie Oakley	False	0.05
12	Sylvia Marshall	True	0.15
13	Mike Vaughn	True	0.15
14	Melinda Shepherd	False	0.05
15	Doris Goldsmith	True	0.15
16	Chris Neal	False	0.05
17	Harry Chester	True	0.15
18	Marla Farrant	False	0.05
19	Tania Kennedy	False	0.05
20	Bryon Gibbons	False	0.05
21	Ivette Taylor	False	0.05
22	Chadwick Eaton	False	0.05
23	Chuck Plumb	False	0.05
24	Candace London	False	0.05
25	Marvin Wilde	True	0.15
26	Barry Taylor	True	0.15
27	Elijah Harrison	False	0.05
28	Jazmin Mason	False	0.05
29	Ramon Whinter	True	0.15
30	Candace Darcy	False	0.05
31	Leilani Rose	False	0.05
32	Noemi Miller	True	0.15
33	Alba Carson	True	0.15
34	Russel Walter	True	0.15
35	Maia Kennedy	False	0.05
36	Fred Clifton	False	0.05
37	Alexander Kennedy	True	0.15
38	Naomi Henderson	True	0.15
39	Hank Howard	False	0.05
40	Dorothy Mackenzie	False	0.05
41	Elena Gregory	True	0.15
42	Helen Adams	True	0.15
43	Lucas Brooks	False	0.05
44	Angelina Ross	True	0.15
45	Remy Benfield	True	0.15
46	Mackenzie Neal	True	0.15
47	Janelle Parker	True	0.15
48	Matthew Woodley	True	0.15
49	Anthony Coleman	True	0.15

In [ ] :