

PYTHON LAB PROGRAM 10

10. AIM: Demonstration of working with PDF, word and JSON files

a) Write a python program to combine select pages from many PDFs

```
from PyPDF2 import PdfWriter, PdfReader
```

Code:

```
from PyPDF2 import PdfWriter, PdfReader

def combine_pages(selected_pages, output_file):
    pdf_writer = PdfWriter()

    for pdf_file, page_numbers in selected_pages:
        with open(pdf_file, 'rb') as pdf:
            pdf_reader = PdfReader(pdf)
            for page_num in page_numbers:
                if 1 <= page_num <= len(pdf_reader.pages):
                    page = pdf_reader.pages[page_num - 1]
                    pdf_writer.add_page(page)
                else:
                    print(f'Page {page_num} is out of range for {pdf_file}.')

    with open(output_file, 'wb') as output:
        pdf_writer.write(output)

# List of tuples containing PDF filenames and corresponding page numbers
selected_pages = [
    ('PYLAB-Fifth Program.pdf', [1, 2]),      # Select page 1 and 2 from file1.pdf
    ('PYLAB-Fourth Program.pdf', [1, 2]),     # Select page 2 and 4 from file2.pdf

    # Add more PDFs and page numbers as needed
]

output_filename = 'combined_output.pdf'
combine_pages(selected_pages, output_filename)
```

NOTE: This program allows you to extract specific pages from two PDF files, "**PYLAB-Fifth Program.pdf**" and "**PYLAB-Fourth Program.pdf**," by entering the page numbers as user input. Once you input the desired page numbers, the program fetches those pages from both PDF files and combines them into a new file called "**combined_output.pdf**." This way, you can easily compile the desired pages from multiple PDF files into one document for your convenience

b) Write a python program to fetch current weather data from the JSON file

Code

```
import json
```

```
# Load the JSON data from file
```

```
with open('weather_data.json','r') as f:  
    data = json.load(f)
```

```
# Extract the required weather data
```

```
current_temp = data['main']['temp']  
humidity = data['main']['humidity']  
weather_desc = data['weather'][0]['description']
```

```
# Display the weather data
```

```
print(f'Current temperature: {current_temp}°C')  
print(f'Humidity: {humidity}%')  
print(f'Weather description: {weather_desc}')
```

Output:

```
Current temperature: 15.45°C  
Humidity: 64%  
Weather description: clear sky
```

NOTE: Save json file in same working directory. Copy json text into notepad select save as all files and give name weather_data.json

```
{  
  "coord": {  
    "lon": -73.99,  
    "lat": 40.73  
  },  
  "weather": [  
    {  
      "id": 800,  
      "main": "Clear",  
      "description": "clear sky",  
      "icon": "01d"  
    }  
  ],  
  "base": "stations",  
  "main": {  
    "temp": 15.45,  
    "feels_like": 12.74,  
    "temp_min": 14.44,  
    "temp_max": 16.11,  
    "pressure": 1017,  
    "humidity": 64  
  },  
  "visibility": 10000,  
  "wind": {  
    "speed": 4.63,
```

```
"deg": 180
},
"clouds": {
  "all": 1
},
"dt": 1617979985,
"sys": {
  "type": 1,
  "id": 5141,
  "country": "US",
  "sunrise": 1617951158,
  "sunset": 1618000213
},
"timezone": -14400,
"id": 5128581,
"name": "New York",
"cod": 200
}
```